Japanese doctor-patient discourse

An investigation into cultural and institutional influences on patient-centred communication.

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ABSTRACT

This thesis investigates how Japanese doctors create and maintain patient-centred consultations through their verbal interaction with patients, and the extent to which features of Japanese interpersonal communication influence the institutional discourse. Audio recordings of 72 doctor-patient interactions were collected at the outpatient department of a Japanese teaching hospital. All consultations involved new cases. There were two kinds of consultations: a preliminary history-taking interview with an intern and a diagnostic consultation given by an experienced doctor. After transcribing the recordings sequences of the discourse were analysed qualitatively on a turn-by-turn basis and a corpus of the data was analysed quantitatively to establish frequencies of discourse features related to patient-centredness. A review of literature (Chapter 2) establishes the standard structure of medical consultations and the relationship of the doctor and patient during consultations in terms of the asymmetry of speaking initiative according to consultation phases. The second part of Chapter 2 is an examination of Japanese communication style, attested to be influenced by culturally specific norms of behaviour that are demonstrable through verbal interactions. Chapter 3 describes the research method, and this is followed by four chapters of analysis. Chapter 4 describes the nature of the two kinds of consultations; the phases they include, and how the participants shift from one phase to the next with phase transition markers. Particular attention is paid to opening and closing phases, as they are most relevant to the establishment and consolidation of a patient-centred relationship. Chapter 5 investigates patterns of questioning by doctors, identifying functional categories of questions to see how they are used to coax information from the patient. Chapter 6 examines how the doctor encourages the patient's narrative through backchanneling; how the doctor accommodates the patient through sensitive explanations of treatments and procedures; and how the voice of the patient emerges through calls for clarification, and voicing concerns. Chapter 7 highlights discourse sequences that may indicate culturally specific influences, and examines the emergence of laughter as an indicator of Japanese interpersonal interaction.

The features of these Japanese consultations are consistent with medical consultations described in English speaking settings regarding phases and the discourse strategies used to achieve patient-centredness. While there appear to be Japanese cultural influences in the interactions consistent with previous cross-cultural studies the author argues that the institutional setting (clinical framework) is more immediately relevant to the conversational dynamics of the interactions than the Japanese cultural setting. Finally, medical consultations involving new cases have more features of service encounters and therefore not controlled by the guidance-cooperation model of doctor-patient interaction.

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TRANSCRIPTION SYMBOLS

[ ]	marks overlapping talk D: oh I [see] P: [yes, I'm] glad you like it.
=	indicates that talk is latched; there is no interval between the end of a prior turn and the start of the next turn A: and I told him = B: = you (.) you're not very happy are↑ you
(2.0)	marks pause, silence (in tenths of second) D: um: (1.5) do you like toast↑
(.)	indicates a micropause (less than 0 5 secs) D: he (.) he went to the market yesterday.
((sighs))	indicates non-verbal noise, behaviour OR comment by the transcriber, not on the recording P: is it serious doctor↑ D: ((shakes head)) it's all right↓
↑	indicates a rise in pitch D: what↑
↓	indicates a drop in pitch P: oh no↓
hh, hee, heh	indicates laughter or breathiness D: you'll soon be fit enough to run a marathon P: heh heh hh (.) doctor you must be joking
!	denotes emotion P: you can't be serious!
<u>dog</u>	underlining marks emphasis D: take <u>three</u> pills after breakfast (.) and <u>two</u> after dinner (.5) OK↑
HUH	capitals mark increased loudness D: put your coat on the chair NO NO (.) NOT OVER THERE that's my hamster cage.
°	marks talk which is softer, quieter P: and then (.) a car came round the corner ° and ran over my cat°
:	indicates that the preceding sound has been lengthened D: um:: what's you're name
> <	indents mark speech which is compressed, faster P: john (.5) >don't stand on the floor I've just washed it!<
< >	marks speech which is hesitant, slower D: julie (.5) <don't move (.) there's a tarantula on your shoulder>
(…)	indicates unclear or inaudible speech that can not be transcribed with certainty P: ingrid is (... minded so she ...)

1. INTRODUCTION

1.1 A Japanese medical encounter

The young female patient coughs as she goes through her complaint. Sitting across the table from her in the small cubicle is a newly qualified doctor in his late twenties. He is hard at his task of directing her attention by going through the series of questions he has studied in medical school from which he intends to deduce the cause of her illness and make his diagnosis. The patient wants to get this over with as soon as possible and obtain the medicine she knows she needs to relieve the miserable symptoms. While she knows she has to go through this long question and answer routine – after all, this is what doctors and patients do in consultations, isn't it – she wants to get to the end of the process as soon as possible and be on her way. To cap it all, this young doctor in front of her does not seem to be on top of her medical information and he keeps getting things wrong. Still, she answers his questions, hoping that by giving him the information she will get her medicine sooner rather than later. Here is what happens when they reach the point in the consultation where the topic of the medicine comes up.

	Original utterances (Japanese)	**English Gloss**
1	D: a. kouseizai de deta koto ga [aru?]	*D: ah, it's come on with antibiotics, [has it?]*
2	P: [ha:i]	*P: [ye-es]*
3	(2.5 – *sound of writing*)	*(2.5 – sound of writing)*
4	D: kou iu keitou no kusuri dame desu yo tte sensei ni oshiete moraimashita	*D: that kind of medicine is no good, they say, did the doctor tell you about it?*
5	P: ha. hai [oshiete]	*P: ye-es, yes. [s/he told me]*
6	D: [nani kei] toka tte iware[mashita]	*D: [what kind] did s/he [say?]*
7	P: [nani kei]	*P: [what kind]*
8	(2.0)	*(2.0)*
9	P: u:n a. techou ni kaite arimasu	*P: mmm, oh, I wrote it in my diary.*
10	D: ima ha mottenai?	*D: you don't have it now, do you?*
11	P: mottenai desu ne hai	*P: no, I don't have it, yeah.*
12	D: kouseizai desu ne	*D: it's an antibiotic, isn't it.*
13	P: ha:i	*P: yes*
14	D: (0.5) u:n kyou hyotto shitara kouseizai no kusuri detara tsukaenai kamo shiremasen ne	*D: (0.5) mmm if say you were prescribed some antibiotics today, you probably wouldn't be able to take them you know.*
15	(1.0)	*(1.0)*
16	P: ° ° a. oo kei desu° ° (2.0) <*sniff*>	*P: ° ° oh, OK° ° (2.0) <sniff>*
17	D: nanka kaze tte iu ka sou iu no ga	*D: well, a cold you say, that kind of thing*
18	(1.0)	*(1.0)*
19	D: arimasu kara ne ichiou tan mo deteru shi	*D: one gets those doesn't one, and phlegm even comes out as well.*
20	P: ano nyuuin shita [toki no]	*P: ermm, [when] I went into hospital*
21	D: [ee]	*D: yeah*
22	P: ano kiroku toka dewa wakaranai desu ka	*P: ermm, can't it be seen from the/my records?*
23	D: CHOTTO NE >kocchi ni wa ne (.) mada	*D: LOOK >here, erm I haven't got them*

	kitenai n desu yo ne sono nyuuin no kiroku ga dakara chotto shirabenai to wakannai kara<	*yet, actually, until I've checked those hospital records I won't be able to find out<*
24	P: (0.8) ° ° fu:n↓° °	*P: (0.8) ° ° hmm↓° °*
25	(1.0)	*(1.0)*
26	D: ato zensoku toka desu ne atopii toka sou iu koto wa arimasu	*D: and asthma you know and atopy and so on do you have anything like that?*

In this sequence there are two key moments affecting the relationship between the two participants. First, the doctor's statement in line 14 that the patient is unlikely to get any medicine today, to which the patient responds with an unenthusiastic acknowledgement in line 16. Next, the patient's attempt in line 22 to persuade the doctor to find a way round the procedural problem, thereby reopening the possibility of her getting the medication, to which the doctor responds somewhat forcefully, asserting his position of power to halt the patient's strategy in its tracks. The CHOTTO is crisp and urgent, and its force is further enhanced by NE. Together, these two components work to signal the importance of the speaker's forthcoming utterance. From this point on, as the doctor winds up the consultation, and while the patient continues to cooperate in the required manner by answering his questions about her family medical history, it becomes clear that her mood has shifted from one of hope that she will get relief for her condition to one of resignation that she now knows she will not. The two participants continue to play out their roles, but the patient's answers are perfunctory and there is a sense that they are now both just going through the motions that the protocol of the medical consultation demands until the doctor finishes his questions and is able to conclude the interaction according to the expected norms.

The doctor is the gatekeeper to the treatment that the patient desires, and the rules of behaviour of this conversation are determined by the setting in which these two characters play out their institutional roles and the cultural conventions that both are intuitively aware of, yet which neither of them acknowledges overtly. All of this gives the doctor more power to control the direction of the consultation than the patient. He has certain rights regarding speaking turns and rights to ask personal questions that the patient does not have. They are both stuck in their situation until it can be ended by the appropriate closing utterance or behaviour, more likely to come from the doctor than the patient.

The aspects of institutional discourse and the asymmetry of power between the participants that the type of interaction described above entails are the object of this research paper. Specifically, how do Japanese doctors use the status given to them by their institutional role to control the consultation to get the information they need as efficiently and sympathetically as possible?

1.2 Aims of the study

1.2.1 Research question

This thesis is a fieldwork driven study of Japanese medical consultations. It studies the structure and discourse patterns of medical consultations between Japanese doctors and patients recorded in one outpatient department of a large teaching hospital in the north of Japan on four days during September, 2001. How do the participants relate to each other during their encounters and what does this tell us about their roles in this discourse setting, the medical institution or the national cultural setting? I draw on both the detailed qualitative methodology offered by conversation analysis, and also take advantage of software and analytic techniques developed through corpus linguistics. I believe that these two approaches working in tandem, though different in their aims and backgrounds, reveal a more complete picture of the structure and patterns of the types of conversations I am examining than either one of these approaches would reveal by itself.

Specifically, this study considers how Japanese doctors achieve patient-centeredness through verbal interaction with their patients, through their respective institutional roles (their 'footing' (Goffman 1981: 124-159). In this thesis 'patient-centred' describes medical consultations where the patient is the most important participant, not the doctor. Such consultations can be characterised by the doctor promoting the involvement of the patient in the diagnostic process and methods of treatment. Boudreau et al (2007) characterise a patient-centred consultation as one where "the patient as the focal point, underlining the personal and social contexts of an illness."

How do the discourse features during the different phases of the encounter relate to changes in footing at those points, and how do the participants co-construct their conversations (establishing rapport, asking for and giving information) to make them more patient-centred? Through close observation of the talk-in-interaction I examine how patient-centeredness is created and maintained as the two participants move in and out of the different phases of the consultation, and the alignment between them shifts. In attempting to understand the utterances on a turn by turn I argue that the discourse is shaped and restricted by both the institutional setting (the hospital) and the social setting (the Japanese speech community at large) in which the participants find themselves.

An important way in which patient-centredness can be promoted or maintained by a doctor is through *backchanneling* - encouraging the patient to keep the floor and continue talking. This feature of talk in interaction forms a central part of my investigation into Japanese consultations. A backchannel (or *continuer* (Nofsinger 1991)) is a brief response by the listener in a conversation that indicates he/she has understood or agrees with what the

speaker is saying, but it signals that he/she does not wish to take the floor. For example, '*I see*', '*uhu*' or '*really?*'. In other words they signal involvement by the listener in a minimal way, but it also encourages the speaker to keep talking. Schiffrin describes backchanneling as "speaking for another", which can be interpreted as "chipping in" or "butting in" (Schiffrin 1994: 109). Silverman (2005) refers to backchanneling in doctor-patient communication as *encouragement*, which is one sub-category part of a broader concept he calls *facilitating*; any verbal or non-verbal behaviour by the doctor to encourage the patient to elucidate symptoms. Backchanneling, continuers and facilitating are not synonymous, as I shall explain in §2.3.5, but in all cases the function is to signal involvement and that the speaker should keep the floor.

Through my investigation of patient-centredness I anticipate a number of outcomes from my research. In particular I hope:

- it will increase our understanding of discourse patterns employed in Japanese talk-in-interaction in general, beyond the medical setting.
- it will contribute to our understanding of talk-in-interaction in institutional settings outside Japan, and through this, it will add to our understanding of discourse features that are specific to Japanese interactions.
- it will have practical implications for the communication skills training of Japanese doctors.

1.2.2 Motivation for the research

This study has been motivated by two factors. Firstly, there has been a growing concern in Japan concerning the development of the communication skills of doctors, yet research into Japanese doctor-patient communication has so far been quite limited, especially from a linguistic or sociolinguistic perspective. The general concern from society at large is born out in various ways: the increase in the number of communication skills courses in medical schools; legislation concerning informed consent, which puts more onus on the doctor to explain procedures and treatments to the patient; and changing attitudes to the role of the doctor in Japanese society, which appear in the written and spoken mass media.

Secondly, for the past eight years I have been part of a team of language teachers enlisted by the graduate school of medicine at Hokkaido University to teach English for medical purposes to medical students, which has led me to seek a more formal analysis of doctor-patient communication. My regular contact with staff and students at the medical school have allowed me to learn about the goals and principles of communication skills training of the medical students. These are informed by the latest research and developments in the international medical community through publications in academic journals,

presentations at academic conferences and the research activities of the faculty members. On the other hand, these students are being trained to work as doctors specifically in Japan, which raised the question about possible differences in the discourse between the Japanese and English medical consultations. I wanted to find out how similar the communication skills taught in the medical English classes, based on an English cultural context, were to the consultation skills they were being taught as a part of their general medical training.

The medical English programme was instigated in 1996 as part of a general strategy to encourage more graduates to pursue a career in medical research. International medical research is routinely disseminated through English language medical journals and conferences, so there is a need to ensure the students' English ability allows them to participante effectively in this international research community. The course develops reading skills using articles from English medical journals, and it builds medical vocabulary and oral communication skills through task-based activities based on medical topics[1]. During the course students perform doctor-patient role-plays in English to develop their communicative abilities. These role plays are a useful mechanism to teach students about language appropriacy in two ways: firstly, students are learn the appropriate English medical terms concerned with illnesses they have researched (anatomy, physiology, diagnostic procedures, therapy, surgical procedures, medications, etc.); secondly, they consider how they would explain this medical information to patients who have no medical training - how would a non-technical explanation, with more eye-contact, more repetition and more checking of the patient's understanding, be more effective than a single, short reiteration of the contents of a medical text book..[2] The objective is to enable the exchange of relevant medical information in the most efficient way possible and to promote the use of language that would be more understandable to a patient.

The role-plays and dialogues were not intended to provide consultation skills training in English for NNS doctors intending to work in English speaking settings (as is the basis of other ESP courses such as Candlin et al, 1981), and neither were they suitable for such a purpose; such training was carried out wholly in Japanese, under the control of the professor of primary care. On the contrary, our English D-P roleplays were specifically devised for the students to improve their English communication skills and learn useful medical vocabulary. Therefore, our approach differs from However, it became apparent that while these

[1] Original materials have been developed for the oral communication section of the course, published and updated annually as '*English on Call*', ed. Mark Holst & Christopher Glick (Hokkaido University Press). Additional materials used are Maher (1990) and Eric H. Glendinning & Beverly Holmström (2005). Holst and Evans (2000) contains a full description of the course and the rationale behind it.
[2] Students are given various explaining tasks to do, such as teaching an imaginary 10-year-old child how blood circulates around the body.

consultation role plays served their English language learning function well, the strategies in English they were being taught in our classes may either contradict or bear little relation to the real life Japanese consultations they would carry out when they became doctors. Indeed my own experience as a patient in both Japan and the United Kingdom has suggested that communication styles may differ on a national cultural level – specifically I perceived the Japanese consultations to be more paternalistic, and less patient-centred. These factors motivated my decision to investigate the conversation dynamics of Japanese medical consultations.

1.2.3 Type of study

Previously, I made a comparative study of communication strategies in Japanese and English (Holst, 1996). My initial research investigated the possibility of transfer of pragmatic strategies from L1 to L2 among Japanese learners of English, using questionnaires of speaking situations given to native English speakers and Japanese learners. The Japanese informants were all high school teachers of English who had just arrived in the UK, so their English language proficiency was high, but most of them had had little experience using the language in a native English speaking setting. I found some evidence of pragmatic transfer, but the degree of transfer depended on the situation, the social distance between the speakers and the power distance between the speakers. The main limitation of that study was in choosing a questionnaire as the instrument of research. Asking respondents to imagine what they would say in a particular situation is not as authentic as observing and recording actual face threatening encounters, so my results could only hint at the possibility of pragmatic transfer. After completing this research my intention was to carry out a much more detailed study using authentic recorded conversation data. This present study therefore develops my previous work by making a systematic study of Japanese interpersonal communication in a specified domain, using many examples of first hand recorded data, and targeting a particular aspect of the interaction – patient-centredness.

The literature on doctor-patient communication in English-speaking settings is substantial, and there are various collections of transcripts of consultations that are freely available for research (e.g. the British National Corpus - BNC, 1994). However, I was unable to find any freely available data of recorded Japanese consultations. Therefore, in order to understand about patient-centredness in Japanese consultations it was necessary to make original recordings in a controlled and systematic way, which could be analysed both quantitatively and qualitatively through conversation analysis. My position teaching English to medical students at Hokkaido University brought me into contact with academic and clinical faculty, and this offered a good opportunity to collect authentic data of doctor-patient

communication.

1.3 Background to the Study

1.3.1 Communication skills training in Japan

In recent times there has been a significant recognition in both the UK and in Japan of the need to provide better communication skills training to medical students. In 1993 the General Medical Council stated that 'deficiencies in this area [communication skills] are responsible for a high proportion of complaints and misunderstandings.' (General-Medical-Council 1991; General-Medical-Council 1993). More recently, the GMC's 'curricular content' for 2002 recommendations for the training of undergraduate medical students specifies communication goals in more detail:

20. Graduates must be able to communicate clearly, sensitively and effectively with patients and their relatives, and colleagues from a variety of health and social care professions. Clear communication will help them carry out their various roles, including clinician, team member, team leader and teacher.
21. Graduates must be able to do the following:
    a. Communicate effectively with individuals regardless of their social, cultural or ethnic backgrounds, or their disabilities.
    b. Communicate with individuals who cannot speak English, including working with interpreters.
22. Students must have opportunities to practice communicating in different ways, including spoken, written and electronic methods. There should also be guidance about how to cope in difficult circumstances. Some examples are listed below:
    a. Breaking bad news
    b. Dealing with difficult and violent patients.
    c. Communicating with people with mental illness, including cases where patients have difficulties in sharing how they feel and think with doctors.
    d. Communicating with and treating patients with severe mental or physical disabilities
    e. Helping vulnerable patients

(General-Medical-Council 2002)

In Japan, there is a similar recognition of the importance of teaching effective communication skills as part of the overall undergraduate medical school curriculum (Tsuda 1994; Mukohara et al 2004). For example, the communication skills course at Hokkaido University Hospital, where I carried out my research, is based on patient-centred (mutual participation) principles, specifically the LEARN model: Listen, Explain, Acknowledge, Recommend, Negotiate. The professor teaches the theory through academic articles and other

[3] On this point I received the following reply from Gene Lerner, Associate Professor at UC SB: 'If virtually all CA work is either applied or in the service of other disciplines (and I think these may be somewhat distinct things), then CA will wither because we are not learning anything new about talk-in-interaction, but only applying and re-applying the very little we already know.'

materials pertaining to consultation skills, and students have short consultation skills practices from their 2nd year, culminating in consultation role-plays with actor/patients in front of their peers and the professor of primary care during their final year of clinical training.

There are significant differences in the Japanese system of health care and medical training compared to the UK, perhaps most notably regarding the proportion of doctors in Japan who become general or family practitioners. In the UK 34,855 out of 117,806 doctors (29.5%) are general practitioners, and general medicine is the career of choice for newly graduated doctors[4]. On the other hand general medicine has a short history in Japan; the first department of general medicine was opened in 1981, and by 2003 still only 40 out of 80 Japanese medical schools had a department of family medicine (Takemura 2003: 188-9). Most of these departments take part in the clinical skills development of medical students, including caring for patients in the outpatient clinic, and this is the case at Hokkaido University medical school. However, this belies the fact that in several aspects the practice of general medicine in Japan is different from that in the UK or the USA: for example, general medicine is usually restricted to university hospitals rather than being community based, and it is more limited in the areas of primary care it covers (ibid 189). Moreover, very few Japanese medical students are opting for a career in general medicine (only 1 student out of 100 at Hokkaido University), and even in a big city like Sapporo general practitioners are extremely rare. This problem has been noted since at least the mid 1990s – Ohtaki et al (1995) noted the paucity of training and understanding of primary care among Japanese medical students, and called for more primary care doctors to act as role models in the system of medical education in Japan. This means that when people become ill, before they seek professional medical help they have to decide which specialist would be most likely to help them. There is no concept of a local GP as the first point of contact as is the case in the UK.

One more way in which the health care system in Japan differs from that in the UK is in the distribution of medical care between private and public practice. My study took place at a large public teaching hospital in the centre of Sapporo, which would not normally be the first port of call for patients. More usually, with the onset of illness the person would procede to a smaller private clinic specialising in appropriate area of medicine (as far as he/she can determine). The advantages of small private clinics are shorter waiting times, more staff and they are likely to be closer to the patient's home area. On theother hand the university hospital is seen as having the best specialists and facilities, so patients with more serious

[4] For example, according to the University of Nottingham 50% of its medical graduates enter general practice, http://www.nottingham.ac.uk/medical-school/student_support/handbook/what_happens.html;

illnesses would be likely to go there, either on their own initiative, or on referral from their private clinic. In either case, the medical treatment is paid for by the same system – a national health insurance scheme covering about 70% of the costs. The patient pays for the remainder.

1.3.2 Public perception of Japanese doctors' communications skills

Guo et al studied patient satisfaction with their medical consultations by surveying 277 'self-referral' patients with a questionnaire about their visit, and then compared those results with results of the same survey carried out on 'physician referral' patients. They concluded that more openness in doctor-patient communication increases communication and therefore patient satisfaction, and 'may be helpful to minimize the self-referral phenomenon in Japan' (Guo et al 2002: 331). The inclusion of communication skills training in the report perhaps reflects a feeling in Japanese society at large, which is coming to see effective communication as being an important part of the consultation and treatment process. For example, in 1999 the current affairs magazine *Aera*, published an article on doctor-patient communication, explaining how good communication skills can lead to more effective treatment, and showing how doctors are being trained in improving those skills (Sato 1999). The article describes and discusses a series of cases that have been used in training, focusing on how the doctor should respect the patient's autonomy of decision. Two problem cases are cited. First, in order to be considerate of the patient's feelings a doctor did not tell the patient the name of his disease (terminal cancer). This is a common problem among doctors in Japan, even though informed consent is legally required to assure the patient's autonomy of decision. Subsequently, the patient spent 18 months fruitlessly trying to get treatment for something that could not be cured. This case highlights the fact that there are many doctors who monopolize special medical knowledge. Second, a doctor who could not find any particular medical problem with his female patient asks her if she has been suffering from any stress recently. She replies her daughter died about five months ago suddenly. "Are you still in shock even now?" he asks, in a businesslike manner. Irritable bowel syndrome is diagnosed and the patient is advised to avoid stress. The patient wants to talk about the death of her daughter, but the doctor wants to concentrate on the physical symptoms, so the consultation finishes without the patient's worries being resolved.

Having stated the problems connected with doctors' poor communication the writer then gives examples of good practice. For example, showing how symptoms are reduced through the doctor's skillful questioning and sensitive comments, which allow the patient to release deep emotion through tears. After this the doctor can get back to the practical business of diagnosis and treatment. Or how bad news is given in a patient centered way by stressing the patient's autonomy of decision, and how the doctor and the patient can think about the problem together (Sato 1999). This kind of discussion in the mainstream Japanese media indicates both a rising awareness of poor communication skills among doctors, and that better communication can lead to better treatment.

1.4 Overview of the Thesis

This thesis is divided into seven further chapters. Chapter 2, '*Doctor-patient interaction and the Japanese discourse setting',* introduces and explores relevant aspects of doctor-patient communication and Japanese culture and language. Regarding the former, I begin with a review of studies from a clinical or medical perspective since the 1950s, which establish that better communication skills by doctors will lead to more effective diagnosis and treatment of patients; such studies have had an impact on government guidelines regarding the training of medical students (particular in the UK and Japan). This is followed by a consideration of sociolinguistic studies of medical communication that examine the discourse structure of consultations. After this, I consider the effect of culture on communication, specifically I examine studies of Japanese interpersonal behaviour and I .consider two comparative studies of English and Japanese patterns of communication. Finally, I consider other non-cultural factors that may impact Japanese doctor-patient consultations.

Chapter 3 opens with a restatement of the research questions in the light of the information in Chapter 2. To address these questions a series of Japanese consultations were recorded in a large teaching hospital. The main purpose of this chapter is to describe the conditions under which these data were collected, and how the data were prepared for analysis. The final section of this chapter explains the analytical approach used in this research, which combines qualitative examination of conversation sequences, informed by applied conversation analysis, with quantitative analysis of lexical and functional categories throughout the data, using concordance software.

Chapter 4, '*The structure of the consultations'*, is a description of the phases of the two types of consultations I recorded – the history-taking consultations involving the junior doctors (hereafter 'JDs') and the more diagnostic or treatment oriented consultations involving the senior doctors (hereafter 'SDs'). In this chapter I describe the phases or 'conversational episodes' (Whitely 2002: 315) that the doctors and patients go through,

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[5] Original materials have been developed for the oral communication section of the course, published and updated annually as '*English on Call*', ed. Mark Holst & Christopher Glick (Hokkaido University Press). Additional materials used are Maher (1990) and Eric H. Glendinning & Beverly Holmström (2005). Holst and Evans (2000) contains a full description of the course and the rationale behind it.
[6] Students are given various explaining tasks to do, such as teaching an imaginary 10-year-old child how blood circulates around the body.
[7] For example, according to the University of Nottingham 50% of its medical graduates enter general practice, http://www.nottingham.ac.uk/medical-school/student_support/handbook/what_happens.html;
[8] This involves being able to recognize complete sentences – Sacks defines a sentence as a unit which has 'its completion recognized on its completion, and that it is not completely recognizable by participants; also it can be monitored, from its beginning, to see from its beginning what it will take for its completion to be produced in such a way that, on its completion, its completion may be recognized.' Coulthard, M. (1985). An Introduction to Discourse Analysis. New York, Longman.

drawing on both statistical evidence across all the conversations through corpus analysis, and through examining one complete example of each of the two types of consultations in closer detail.

Having established the structure of the conversations, verbal interactions between the participants are examined in more detail. Chapter 5, '*Doctor's questions',* explores this by examining the way the doctor asks for information from the patient. The chapter begins with an explanation of features of Japanese questions. After this there is an analysis of question types I identified in the data, containing a description of two functional categories of doctors' questions. In the role of investigator and topic instigator the doctor elicits new information through open, probing questions. Also, in the role of appraiser, the doctor asks for clarification, and draws out details from the patient so as to identify information likely to aid the deductive process and lead to a successful diagnosis. This is followed by a statistical overview of questioning patterns across the Japanese data. The questions the doctor uses are an indicator of patient-centeredness, since the capable doctor gets information efficiently through being sensitive to the patient, and his/her questioning technique is the most obvious means by which he achieves this end.

Chapter 6 further explores how the doctor through his/her explanations to the patient, and his/her listening behaviour achieves patient-centeredness during explanations by the patient. The doctor exhibits patient-centeredness not only through questioning and the way he or she responds to the patient's input, but also in the way he or she explains procedures, treatment and details of the illness to the patient. This chapter is titled '*The voice of the patient'*, since a patient-centred consultation is one where a successful outcome can come about only if the patient is allowed to play a full part in the deductive process. This is achieved not only through the information he delivers explaining the series of events that has brought him or her to the consultation, but also the doctor's empathetic explanations which sees the patient as a collaborator, not the object of investigation. To investigate this, I look at backchannelling by the doctor, and at the doctor's long explanatory utterances, which I see as a kind of narrative.

As in chapter 5 my analysis is both qualitative, examining some sequences in the data, and quantitative, looking at the patterns across the data to allow a comparison between the junior doctor and senior doctor consultations.

Chapter 7, '*Patient-centeredness in the Japanese context'* develops the analysis from the institutional setting to the cultural setting. It examines sequences of discourse in the Japanese consultations to see if they show evidence of Japanese cultural specific

interpersonal behaviour, discussed in Chapter 2. I seek to identify how such cultural influences might affect the institutional framework, to make the pragmatic features of these consultations distinctly Japanese in nature. To achieve this there is a qualitative study of three sequences from the Japanese data, and a quantitative study of the emergence of laughter in the Japanese data, contrasting it with the emergence of laughter in British doctor-patient consultations.

The final chapter, '*Conclusions and Implications'*, considers the relationship between the institutional structure of the Japanese consultations, and the general cultural setting in which they take place: to what extent does the cultural setting affect the interaction between doctors and patients, and how do these emerge in the JD and SD consultations respectively? I conclude by considering some practical implications of the research and what potential for further study it opens up.

2. DOCTOR-PATIENT INTERACTION AND THE JAPANESE DISCOURSE SETTING

2.1 Doctor-Patient Communication

The extensive body of research into communication in the medical setting, specifically between doctor and patient, has been motivated by a wide variety of concerns, depending on the academic background, training and interests of the researchers involved. The aim of this section is to summarise those works that set my own investigation in context, and are directly relevant to its research aims.

Maclean (1989) categorises medical communication research into three areas ('three perspectives or attitudes to medical language'): the doctor's – clinical aspects (the purpose of the interactions from a medical point of view); the behavioural scientist's and the sociolinguist's. However, she points out that both clinical and behavioural studies, while contributing much to our understanding of doctor-patient interactions, often take the language for granted; they share 'a "common-sense" conception of language use, and tend to view linguistic description as over-detailed exercises irrelevant to the work in hand' (ibid: 266). In the 1970s, sociolinguists were beginning to take an interest in doctor-patient communication, and Crystal, for example, saw the potential of systematic linguistic study of medical consultation, hinting that prevailing technological and ethical restraints at that time might have contributed to the hitherto paucity of primary data (Crystal 1976: 50). Maclean (ibid.) examines five early studies of the language of consultation (Byrne and Long 1976; Coulthard and Ashby 1976; Candlin et al 1981; Stiles 1978; Skopek 1979), which she saw as 'accumulative' (built up in isolation to each other) and descriptive rather than 'cumulative' (i.e. building on each other). Consequently she calls for more research to test the hypotheses that emerge from the descriptive studies, for example, through the development and evaluation of communicative skills courses that incorporate these analyses, to alert doctors to the power of language.

2.1.1 Patient-centeredness in medical consultations

In this section I focus on studies that explore the character of the doctor-patient relationship starting in the middle of the twentieth century, which have had the effect of making consultations more patient-centred. This has increased the importance attributed to communication skills training in the medical school curriculum as can be seen from government guidelines regarding the training of doctors, and the resulting increase in such courses.

Szasz and Hollander (1956) presented three basic models of doctor-patient relationship: activity-passivity; guidance-cooperation; mutual participation, all of which they claim are necessary for the practice of good medicine, but one model being more appropriate than another in a given situation (Table 2.1).

Table 2.1: Szasz and Hollander's three models of doctor-patient relationship

	Model	Physician's Role	Patient's Role	Clinical Application	Prototype of Model
1	Activity- Passivity	Does something to the patient	Recipient (unable to respond or inert)	Anaesthesia, acute trauma, coma, delirium, etc.	Parent-infant
2	Guidance-cooperation	Tells patient what to do	Co-operator (obeys)	Acute infectious processes, etc.	Parent-child (adolescent)
3	Mutual participation	Helps patient to help himself	Participant in "partnership" (uses expert help)	Most chronic illnesses, psychoanalysis, etc.	Adult-adult

(Szasz and Hollander 1956: 586)

Their paper is important in that it tries to objectify the doctor-patient relationship, arguing that medical professionals should be wary of thinking in terms of good and bad, if by 'good' they mean that the consultation satisfies either the patient's or the doctor's needs. Instead, there should be agreement by both parties about what a successful or satisfactory outcome to the encounter will be: the medical concept of what a satisfactory outcome is – represented by the doctor – may well be very different from the patient's concept, and unless both participants have a clear understanding of 'satisfactory' they do not have a therapeutic relationship with each other. In their framework the first two models take that understanding or agreement for granted, but not so the mutual participation model:

> The third category differs in that the physician does not profess to know exactly what is best for the patient. The search for this becomes the essence of the therapeutic interaction. The patient's own experiences furnish indispensable information for eventual agreement, under otherwise favorable circumstances, as to what "health" might be for him (ibid: 589).

The authors describe the doctor-patient relationship as an ongoing process. For example, in the case of a diabetes patient, when the patient is in a diabetic coma it begins as activity-passivity, later the patient is educated (guided) about his illness at the level of cooperation, finally the patient is treated as a fully-fledged partner in the management of his own health (mutual participation). The doctor must therefore be prepared to change his attitude to accord with these stages. If not he may interfere with the patient's progress:

> The pattern described accounts for the familiar fact that patients often choose physicians not solely, or even primarily, on the basis of technical skill. Considerable weight is given to the type of human relationship, which they foster. Some patients prefer to be "unconscious" (figuratively speaking), irrespective of what ails them. Others go to the other extreme. The majority

> probably falls somewhere between these polar opposites. Physicians, motivated by similar personal "conflicts" form a complementary series. Thus, there is an interlocking integration of the sick and his healer (ibid: 592).

This framework allows us to understand the notion of 'patient-centredness' in doctor-patient encounters – the closer the participants move towards the mutual participation model, the more patient-centred the consultations become, whereas the closer they are to the activity-passivity model the more doctor-centred they become. Also, the understanding that no consultation can be categorized as belonging wholly to one or other of the three models is key to much of my discussion in this thesis: there are many shifts in the interpersonal and power dynamics of all the Japanese consultations I recorded.

Szasz and Hollander alerted the medical community to the link between communication and efficacy of treatment, and subsequently, a number of studies were made into patient satisfaction with their consultation experience, focusing on the communication skill of the doctor. Korsch et al discuss patient satisfaction through use of questionnaires, (Korsch et al 1968) (Korsch and Negrete 1972). Responses by 800 patients (mothers – this was a paediatric clinic) were studied. 24% of respondents were dissatisfied with the consultation. In the earlier paper, the main factors identified in these cases were:

- lack of warmth and friendliness by the doctor;
- failure by the doctor to take into account the patient's concerns and expectations from the medical visit;
- lack of clear cut explanation about diagnosis and cause of the illness;
- use of medical jargon.

(Korsch et al 1968: 869)

In the later paper the authors explain how they tagged each utterance by each of the participants in their consultations according to Bales' fourteen categories of friendliness and antagonism.[10] In this way it was possible to show statistically how friendly each of the participants is, and to what extent he or she is antagonized by the other participant, either for a given sequence, a whole consultation, or in general across all 800 conversations in their sample. For example, across all the recordings, they report that 47% of mother's utterances were 'giving information', compared to 36% of doctors' utterances; the mother 'showed tension' in 11% of utterances, compared to 1% of doctors' utterances; and the doctor 'showed friendliness' in 6% of utterances, compared to 3% of mothers' utterances (Korsch and Negrete 1972: 69). They reported that doctors often used terms the patient either could not

[10] The fourteen categories are sorted into four groups: (i) Negative Effect – shows antagonism; shows tension; disagrees; (ii) Neutral Questions – seeking instructions; seeking opinion; seeking information; (iii) Neutral Statements – introductory phrases; gives information; gives opinion; gives instructions; (iv) Positive Effect – simple attention; strong agreement; tension release; friendliness. Korsch, B. M. and V. F. Negrete (1972). "Doctor-patient communication." Scientific American **227, 2: 66**.

understand, or that they misunderstood. Yet this did not always lead to dissatisfaction – some patients were 'flattered' by the doctor using such technical terms, even though they remained 'unenlightened about the nature of the child's illness', regardless of their level of education (ibid: 71-2). More important for the mothers was the perception of how friendly and sympathetic the doctor was to not only the child but to themselves; for example, in one consultation a doctor was apparently ignoring the mother's concern that her child had been vomiting: whereas his line of questioning at this point was directly concerned with this problem (medically), he had failed to make this clear to the mother. At these moments there was a 'complete breakdown of communication' (ibid: 72) as the mothers were so concerned with not getting an answer to their question they stopped concentrating on the doctor's questions. Utterances indicating tension were at their highest at these points. In complete contrast, 46% of doctors' utterances to the child were 'friendly remarks, joking, agreement, support' compared to only 6% of utterances to the mother. Accordingly, a mother's satisfaction was based on the doctor's attitude towards her, not to her child. The paper concluded that much of the mother's dissatisfaction or frustration with the doctor was due to poor communication or miscommunication from the doctor, and more attention to communication skills 'could make a valuable contribution to the quality of healthcare' (ibid: 74).

Having established the importance of good communication skills by doctors, there was recognition that such skills should be developed as a component of undergraduate medical training, although early papers (during the 1970s) indicated an unsystematic approach (see Sanson-Fisher 1981). For example, in one paper Bain (1976) carried out a study of his own recorded consultations in order to study D-P interaction, which, he suggests, could be employed in undergraduate or postgraduate teaching. Later, Alroy and Ber (1982) and Alroy, Ber and Kramer (1984) describe and evaluate the effects of an interpersonal skills course for trainees in internal medicine, using 'trigger films' (motion pictures with scenes involving doctor patient communication) discussed in small groups of trainees and teachers. Meanwhile, the advantages of using actors as 'simulated patients' to teach communication skills (now common in many teaching hospitals) was first reported by Whitehouse et al (1984). By the end of that decade, communication skills courses are becoming part of the medical curriculum at UK universities: Joesbury et al (1989) reports on a four-week communication skills course set up at Sheffield University, evaluated by student feedback through discussions and questionnaires.

Waitzkin considered the clinical implications of social scientific research, taking sociolinguistic findings (doctors underestimating patients' demand for information), to

improve training programmes for clinical practice, concluding that improved D-P communication is both desirable and possible (Waitzkin 1984). One study (Burnett and Thompson 1986) addressed this problem by asking groups of students to estimate their patients' biological knowledge and lifestyles and compare it with actual data collected from the patients. Initial estimates were poor, but they improved through the discussion process, and it was recognised that an improvement in such knowledge would lead to better communication. Dowsett et al (2000) made an empirical study of patients' preferences of communication style during cancer consultations, the results showing that a patient-centred approach was preferred during the treatment and prognosis stages. Another study focused on the communication skills development of experienced doctors; a study of 79 Hong Kong Chinese general practitioners concluded that communication skills could be taught in large classes and medium sized group practice, without intensive individual supervision (Chan et al 2003).

The need for communication skills training in UK medical schools is addressed by various reports and guidelines by the governing General Medical Council (General-Medical-Council 1991; General-Medical-Council 1993; General-Medical-Council 2002) and in Japan by the Ministry of Health, Labour and Welfare (MHLW 2003). A number of academic articles and course materials have been produced to address the needs of both medical students and doctors; for example, (Larsen et al (1997) – a model for conducting the consultation in general practice; (Enelow et al 1996), (Neighbour 1999) – advice books targeted at doctors; and (Silverman et al 2005), a course book for medical students; Boudreau (2007) a proposed humanistic-based undergraduate curriculum. Finally, training in communication skills has also been identified as a priority even for qualified health practitioners. A recent survey of 1,117 dieticians by Whitehead et al (2009) showed that communication skills were highly valued (98% of respondents) and that they felt the benefits of post-registration training in communication skills.

In turn, this led to research assessing the effectiveness of such courses. For example, Whitehouse (1991) showed how the teaching of communication skills had developed 'considerably' during the previous ten years. A later study of junior house officers at two London teaching hospitals regarding a one-week communication skills course Cantwell and Ramirez (1997) revealed a positive reaction from the majority of participants, although it was not meeting all their needs. On the other hand, a later survey of courses in UK medical schools by Hargie et al is more critical, showing a picture of 'considerable variability in such areas as course content, timing, duration and assessment', with problems occurring due to the 'lack of adequate physical resources and suitably trained staff' (Hargie et al 1998: 25).

O'Neill et al (2005) investigated how well the problem based learning approach, based on *Tomorrow's Doctors*, adopted at the University of Manchester from 1994 prepared medical students to deal with critical incidents or challenging cases in their first medical post compared to graduates of a 'traditional course'. While the PBL graduates were more successful in dealing with uncertainty and knowing their limits, they were no more successful than the traditional course graduates in overcoming communication difficulties. Other studies have focused on student perceptions of communication teaching. For example, Rees et al (2002) investigation of UK students' perceptions of communication skills assessment found that students preferred formative assessment (personal development) rather than summative (exam based), but there was no clear consensus about whether assessment should be by peers, by themselves, by educators or by patients. Also, Greco et al (2002), in a large-scale questionnaire based study of GPs, patients and GP examiners, found there were 'mild (but significant) correlations beteeen patient and GP examiner ratings', especially regarding female GPs.

2.1.2 Investigating the language of doctor-patient consultations

Doctor-patient communication has not only attracted researchers from a clinical background; this field has also been investigated by linguists and psychologists, who, among other things, have been interested in describing the structure of the consultation, the power dynamics between the participants and how this affects turn-taking. In this section, I introduce these themes to give a background to my investigation, but I shall return to them in more detail as I discuss particular aspects of my own data in the analysis sections of this thesis (Chapters 4-7).

Labov and Fanshel (1977) studied psychotherapy as conversation. Their study is a detailed qualitative analysis of five episodes in one psycho-therapeutic encounter, which addresses the questions 'what is the therapist trying to do in this conversational encounter?' and 'what is the patient doing that the therapist must be aware of?' (Labov and Fanshel 1977: 28). This approach is 'comprehensive discourse analysis', intended to be *explicit* ('the procedures are stated as plainly as possible so that anyone else who would like to use them may find it possible to do so') and *comprehensive* (the analyst is 'accountable to an entire body of conversation, attempting to account for the interpretations of all utterances and the coherent sequences between them') (ibid: 354). They examine exactly what the patient actually says, rather than focus on the diagnostic process or the evaluation of the outcome of the encounter, thereby taking the conversation into the realm of language study (discourse analysis), which they hope will be able to explain the concern of therapists regarding the 'phenomenon of resistance' from the patient and why therapy takes so long (ibid: 3). In this

way the authors show that the then developing (theoretical) techniques of microanalysis of conversations in sociolinguistics (in particular they cite Goffman, Sacks and Schegloff (Labov and Fanshel 1977: 25-27) can be applied to help solve problems of a practical nature, e.g. in medicine and psychotherapy.

West (1993) discusses question types used by the doctor and she considers when an utterance actually constitutes a question (reviewed in Chapter 5). Maynard (1991) uses CA to analyse interaction and asymmetry in medical discourse. He also studied the delivery of good and bad news in consultation (Maynard 2003), an important theme in communications skills training (Thomson and Knox (1989) explain how structured interactions between medical students and parents of handicapped children were found to be beneficial to the students ability to break bad news; Cushing and Jones (1995) – evaluating a breaking bad news course; Barnet et al (2007) – experienced consultantants believe that formal training in breaking bad news is useful.) There have also been a number of corpus-based studies, most notably Skelton and Hobbs: a study using concordance to research medical communication (Skelton and Hobbs 1999); a study of cooperative language in primary care consultations by male and female doctors (Skelton and Hobbs 1999); a study of imprecision by a doctor talking to patients with serious illness (Skelton et al 1999); and a study of metaphoric expressions used by British doctors and patients when describing or explaining themselves to the other party (Skelton et al 2002).

2.2 Features of Doctor-Patient Consultations

In this section I consider the relationship between doctors and patients. It is important to establish how the two participants relate to each other because this constrains the way they behave and thus it determines the appropriate discourse register they can call upon. In the Japanese data I explore two particular aspects of the participants' relationship: the institutional setting and the cultural setting. I consider the interpersonal dynamics that exist between the doctor and the patient in a medical consultation, focusing on the asymmetry of power that has such a powerful influence on the discourse.

2.2.1 The Doctor-Patient relationship

Watt discusses the rise of paternalism in the doctor-patient relationship in developed countries, pointing out that in the nineteenth century (the pre-scientific age of medicine, before there was much to combat infectious diseases or serious conditions) how well the doctor was able to communicate with the patient counted for a lot, even to the extent where the patient was dictating the treatment, not the doctor (Watt 2001: 28). Scientific improvements in diagnostic techniques, during the latter part of the nineteenth century

enabled the doctor to 'blind their patients with jargon on occasion', thus elevating the status of the doctor in the encounters, even though effective treatments were still not available. On the other hand, during the early twentieth century, as science began to develop effective weapons against diseases, 'the psychological significance and benefits of doctor/patient consultations were forgotten or at least demoted in importance' (ibid: 29) and power in the consultation shifted in favour of the doctor ("the doctor as God"). This began to change again during the 1970s as a result of the media's presentation of doctors as fallible, in its discussion of the allocation of resources and its dissemination of information on new developments in medical research and treatment. He concludes that to maintain public confidence, physicians 'have to adopt more participatory styles in their individual consultations [… and …] play an increasing role as an interpreter of information to the public' (ibid: 30).

Morgan (2003) gives an overview of the types of relationship between doctor and patient, explaining the roles of the participants and the expected outcomes. She notes how the mood of a consultation can determine how much information the patient gives to the doctor, and therefore how successful the outcome is, both clinically (in determining and treating the organic disease) and psychologically (how satisfactorily the patient feels his/her case has been dealt with).

Morgan goes on to distinguish between doctor-centred and patient-centred consultations (ibid: 55). Doctor-centred consultations have an asymmetrical power relationship. The doctor holds a higher status, representing 'the voice of medicine' (Larsen et al 1997:300), so his focus is on the physical aspects of the patient's disease. The doctor also has more power as the 'gatekeeper' to many healthcare resources otherwise unavailable to the public; a patient cannot obtain certain medications or treatment procedures without the doctor's agreement. This power manifests itself in the use of tightly controlled interview techniques, which mainly consist of closed questions, giving the patient little chance to express his/her beliefs and concerns. On the other hand, the 'voice of the patient' emerges in patient-centred consultations. In this model the doctor is less controlling, facilitating more active participation by the patient in the consultation, thus fostering 'mutuality'[11]. The discourse is characterised by more open questions than in the doctor-centred model; the doctor listens more to the patient, discussing, clarifying and interpreting. Overall, there is more participation by the patient.

[11] 'The active involvement of patients as more equal partners in the consultation and has been described as a 'meeting between experts', in which both parties participate as a joint venture and engage in an exchange of ideas and sharing of belief systems' Morgan, M. (2003). The Doctor–Patient Relationship. Sociology as Applied to Medicine. G. Scambler. Edinburgh; New York, Saunders**:** 49-65.

These two models might better be viewed as the opposing poles of a continuum, so any particular consultation will be more or less patient-centred depending on the participants, especially the doctor. Individual doctors seem to develop their own consulting style, which they seem to stick to with all their patients, reflecting their attitudes to the medical task: whether it is disease-centred or focusing on the patient's concerns (Morgan 2003: 55).

Morgan lists four other factors influencing the consultation style:

- *time pressure*. This encourages a doctor-centred approach as the doctor needs to obtain medical information quickly; the participatory nature of a patient-centred consultation inevitably needs more time to reach understanding;
- the patient's *social or education background*. The more educated the patient, the more he or she participates in the consultation;
- the patient's *knowledge and understanding* of the illness or condition. Patients are more likely to participate in follow up visits than in the initial consultation;
- the *setting*. Unlike the patient, the doctor is on home ground, and therefore familiar with the structure of the consultation, encouraging a doctor-centred approach

(ibid: 56-7)

The patient's preferences for the style of consultation depends on two factors:

- the *patient's state of health*: patients in crisis may prefer to have decisions made for them;
- the *complexity of treatment choices*: the less risky they are the more the patient may want to participate in the decision.

(ibid: 60)

The most common complaints voiced by patients about the doctor's communication skills are: the doctor does not listen; the doctor will not give information; and the doctor shows a lack of concern or respect to the patient. These three factors make the patient less confident about asking questions or expressing their fears to the doctor. One study of 20 general practices in SE England showed that patients often leave the consultation without having voiced all their concerns about such things as diagnosis; what the future holds; ideas about what is wrong; side-effects; not wanting a prescription; or information about their social context (Barry et al 2000). Two factors are identified as being at work here:

- *what* doctors communicate (content): the questions and information gathered
- *how* doctors communicate (process): verbal and non-verbal skills, relationship- building skills, listening skills, how good he/she is at encouraging questions and discussions about the illness.

Also, Wassmer et al (2007) studied how paediatricians communicate with children and parents through a quantitative analysis of 51 recordings and a follow upquestionnaire of parents and children. They concluded that doctors tend to direct the interview and children's contribution is small, and therefore not patient-entred.

To address these concerns there has been a growth in the development of

communication skills courses for medical students around the world, and various text books have been written to assist instructors in achieving this goal (Neighbour 1999; Silverman et al 2005). For example, Silverman et al (pp57-105) identify and explain five tasks that allow the doctor to: a) provide a structure to the consultation and b) build a relationship with patient by discovering the patient's perspective, thereby making the consultation more patient-centred:

I. Establishing the initial rapport and identifying the reasons for the consultation
II. Exploring the problem, understanding the patient's perspective, providing structure to the consultation
III. Developing rapport and involving the patient
IV. Providing the appropriate amount and type of information, aiding accurate recall and understanding, achieving a shared understanding and planning
V. Closing the session.

(Silverman et al, 2005)

The doctor is under pressure to explain technical information to patients about treatment options, risks and benefits in as unbiased and simple a way as possible, within the given time frame and based on whatever evidence is available (tests, patient's information, etc.) (Morgan 2003: 61-2). Within this limited time frame, the doctor has to determine the patient's most pressing concern on this visit, and this concern may not be expressed until midway or even at the end of the consultation. What is more, in addition to the biological aspects (the physical symptoms), this primary concern will often involve psychological and sociological factors that the doctor has to find out – 'since there is significant psychosocial content in approximately 50% of primary care visits, physicians will often obtain an incomplete history if they do not ask about these issues' (Larsen et al 1997: 295). One example of this in the Japanese data collected in the present research is in consultation #46, where the patient begins by explaining that he has an appointment for an exploratory operation in another hospital, but that he thinks that that hospital has a long waiting time for operations, so he wants to see if he can have the procedure at Hokkaido University Hospital instead. After the doctor considers this, concluding that there might not be much of a difference, and the other hospital might in fact be even quicker, the patient changes tack, and explains a central concern to him: he wants to find out more about the illness because the doctor at the other hospital did not give him much information about it:

1	D: maa (.) ABC ga (.) sugu ni haireru yo deshitara tonan ni haitte (.) sate chiryou shite moratte mo ii mo shinai desu ne	*D: well (.) ABC <hospital> (.) you can quickly be admitted you know if you were to go in (.) well you can have the treatment or not you see*
2	P: sore desu nee (.)	*P: also (.)*
3	D: ee	*D: yes*
4	P: ma (.) ee kyou maa saikensa onegai	*P: well (.) um today well I'd like a re-*

	suru n de (.) onegai shitain desu ke domo (.) ABC byouin dewa hanashita dake de (.) nani mo shite nain desu yo (.)	*examination actually (.) I'd like to do that actually (.) at ABC Hospital I only talked they didn't do anything you know (.)*
5	D: ho:	*D: oh:*
6	P: tatoeba isshi desu nee (.) kiita dake na mon desu kara	*P: for example, the doctor right (.) I only listened kind of thing actually*
7	D: ee	*D: yes*
8	P: dou iu koto na no ka ma (.) (…) de itadaite desu ne	*P: what kind of thing well (.) (…) do we get*
9	D: naruhodo	*D: is that so*

#46 P=M61; D=B4M)[12]

The actual reason for the patient's preference for Hokkaido University Hospital (HUH) finally emerges after the doctor has considered the purported reason and rejected it. It seems that the patient had been hoping not to bring into question the competence of the other doctor, and his strategy was to get the procedure done at HUH, thereby severing his links with the other hospital but without having to criticise the treatment he received there. Doctor B4 was not able to understand the patient's real agenda from his initial explanation, and he addressed the concern over waiting time directly. The patient therefore had to reveal his concerns directly as he was unable to make the doctor understand the 'psychological content' through his indirect approach.

Regarding time pressure, one might expect that the less time available, the more pressure there is on the doctor to adopt a doctor-centred approach to elicit information. Time pressure can be relieved in various ways: the doctor can give the patient more detailed information in the form of patient-centred leaflets or videos, or direct him/her to web sites or support groups. Alternatively, in the case of chronic illness the doctor might decide to divide up explanations and discussions between visits, giving the most important, most fundamental or easy to digest information during the initial consultation, and give more detailed information during the course of follow up visits, when the patient has had time to think about and understand the nature of the illness. One study showed that simply increasing the time of a consultation does not necessarily make it more patient-centred (Ridsdale et al 1992). The authors reported that when the booking time of consultations was increased from an average of 6.6 minutes to 10 minutes, while 'some behaviours, such as asking questions, were used slightly more frequently by all doctors … Other skills, such as facilitation and explaining the problem, were used more frequently by only some doctors' (ibid: 60). Even so, the authors conclude that in regard to communication skills training, when the consultation time is reduced doctors' communication skills can be improved through practice with feedback, thereby preventing deterioration in doctor-patient communication. Thus, the

[12] #46 = consultation 46; P = patient; M = male; 61 = 61 years old; D = doctor; B4 = senior doctor number 4; M = male. Henceforth, this system of labelling is used to identify all sequences of conversation throughout the thesis.

doctor-patient relationship is pivotal in determining the communication style of a consultation.

2.2.2 Asymmetry of power in interpersonal communication

In an asymmetrical conversation the participants differ in their ability or power to control the course of the interaction. If there is no asymmetry, both speakers have equal speaking rights and obligations (turn-taking, topic selection and control over who initiates or responds to selected topics). On the other hand, if the institutional setting and/or the roles of the participants enable one of them to have greater speaking rights than another then there is asymmetry. For example in a court, defendants may not speak until they are spoken to (speaking rights) but they must speak when they are spoken to (obligation) (Cameron 2001:162).

Power asymmetry looms large in the analysis of clinical encounters. Mishler, arguing for more patient-centred care, states 'current forms of clinical practice are based on and incorporate an asymmetrical power relationship between patients and health care workers' (Mishler 1984: 193). Meanwhile, Worley and Elder discuss why this power imbalance exists in the first place: 'An examination of the ways in which medical interaction is mediated through language will reveal the vulnerability of all patients as the less powerful party in the encounter'. They argue that the power imbalance inhibits willingness to seek and volunteer information or influence the decisions of the health professionals about medical procedures and the quality of advice offered. Health professionals therefore need to 'raise the status' of the patients as 'genuine co-participants in the process of negotiating meaning'. The institutional nature of the organization limits this possibility, but expediency and the needs of the patient are 'not irreconcilable.' (Worley and Elder 1990:29)

However, as Davis points out in her discussion of the differences between doctors' interactions with male patients and female patients during medical encounters, 'power' is not as straightforward as it might first appear – 'contemporary social theory on power is in a state bordering on utter confusion […] there appears to be little agreement on how it should be defined' and 'Although theorists on power are notoriously adept at displaying the merits of their own conception of power vis-à-vis other conceptions of power, these all-important theoretical differences do not provide secure guidelines for deciding which conception will meet the requirements of an investigation into power in a specific setting' (Davis 1993: 244-5). She goes on to cite conversation analysis (CA) in particular as a methodology that is not 'amenable to the study of power', as it regards participants in a conversation 'as having access to the same kinds of interactional resources for engaging in social interaction. As peers in the interaction game, they do not seem to have a gender or any of the other accoutrements

of asymmetrical power relationships' (p246). So the analyst has no choice but to 'tackle the problem of power through the empirical analysis itself' (p246).

2.2.2.1 Interactional asymmetry

How, then may the notion of power asymmetry be accommodated within the CA framework? The short answer is that it cannot. Instead, analysis is carried out in terms of interactional asymmetry. Drew and Heritage discuss whether all conversations are necessarily asymmetrical with regard to inequalities of knowledge, otherwise there would be no need for most kinds of communication at all (Drew and Heritage 1992: 47-50). ("temporarily, between speaker and hearer at every turn of a talk; between initiator and respondent in a sequence of interaction; between those who are active in shaping the topics and those who are not; between those whose interventions are decisive for the outcomes of conversations and those who are not" p48). On this basis institutional conversations would not be significantly different from any other type of conversation.

However, they argue against this, saying that the institutional setting ensures that the rules of conversation operate independently of the 'extra-discursive identities of the participants' due to such factors as the differential distribution of knowledge, the rights to knowledge, the access to conversational resources and the access to participation in the interaction. Thus, through their capacity as questioner 'institutional incumbents' (doctors) can direct the course of the conversation towards their own ends either by changing topics, or, by their selective interventions and formulations of the other participant (the patient)'s previous answers, they can prevent certain points becoming topics at all. Secondly, while in any conversation there are clearly differences in the states of knowledge between the two participants, in mundane conversations this is short-lived and shifts according to the topic, whereas in institutional conversations it goes beyond the conversation and is not affected by changes in topic (p49). Finally, they consider the difference in perspectives of the participants as to the ends of the conversation: the professional (the doctor), has an institutional perspective that sees the client (the patient) as a routine case, whereas for the client (patient) the encounter is unique and personal (pp 50-51).

2.2.2.2 Asymmetry or alignment?

Alignment concerns 'the processes that keep a conversation "on track"'. It refers to those 'largely verbal efforts to restore or assure meaningful interaction in the face of problematic situations'. It is 'talk used to frame messages for purposes of clarifying, interpreting, and managing conversational meaning and communicator roles"(Nofsinger 1991: 111). Also – "activities through which participants achieve *inter*action by aligning their individual actions." Participants line up their utterances and conversational actions in an

orderly way, thereby achieving inter-subjective understandings rather than separate understandings. Alignment manifests itself in various ways: through *responses* (second pair parts of adjacency pairs), including newsmarks and continuers:

A: I broke up with sally last night

B: really↑ what happened[13]

or collaborative completions:

A: I've got some great news. I heard back from that company I interviewed for and (.)

B: they offered you the JOB. fantastic news (.) we:ll done mate

Alignment is also shown through *repair*, either initiated by the speaker him/herself (*self-repair*), achieved through delay, revision and pre-emption, or *other repair/other initiation*, when the receiver asks for clarification, as in the following imagined exchange:

A: have you seen it then

B: uh↑

A: have you seen that awful new statue they've just put down outside the station

Speakers also use *pre-positioned alignment devices*, which are used to 'attempt to guide the interpretations that might be given to their up coming talk, to avoid negative judgments about themselves by other participants, to emphasize the importance of a particular aspect of what they are about to say, to ensure that their talk will be understandable, or to display their own alignment to a particular issue'. These include *presequences* – adjacency pairs preparing the ground (e.g. summons-answer), *alignment at conversational boundaries* (e.g. negotiating the opening and closing sections of a conversation), and *context* 'what participants *do* to show each other which items of their shared knowledge should be used in making interpretations' (Ibid: 113-143).

Alignment therefore enables the conversation analyst to explain power within the turn-taking sequence, thereby keeping the analysis within the participants' local actions (utterances) and not having to resort to contextual explanation. For example, Hutchby (1997) shows how, in a talk-show discussion, the first speaker has to advance her own opinion about the topic under discussion, therefore putting her in a defensive position, while the second speaker is put in an attacking position: he can win the argument without having to put forward his own original point of view. The second speaker thus has more power, and both participants would therefore attempt to put themselves in second speaker position to gain this power advantage (Cameron 2001:163-4).

[13] See Appendix 6 for the CA transcription symbols and conventions used in troughout this paper.

Finally, Davis's narrow definition of CA ignores the way that 'applied' CA has been used to look at talk in institutional settings, where turn allocation is either pre-determined, or where certain participants have more speaking rights than others. In the next section I consider how applied CA is used to examine institutional talk, specifically medical encounters (e.g. Heritage and Drew 1992; Hutchby and Wooffitt 1998; McHoul and Rapley 2001), overview of the field in ten Have 1999: 162-70). Applied CA is explained in section §3.7.

Institutional talk

While it might readily be assumed that a given setting will have a given effect on the way the people in that setting talk with each other, requiring them to play particular roles and behave according to a set of mutually understood rules, the conversation analyst turns this idea on its head. Instead of the setting causing the participants to behave in a particular way, and to use particular utterances or turn-taking strategies, the setting, or the institution, is talked into existence by the participants: their interactions and utterances create the context (Gardner 2006: 277). In this sense, an analysis of any conversation would therefore reveal something of the context in which it took place, no matter how mundane or casual it might be, but talk that takes place in a court-room in a legislative assembly or in a medical consultation includes institution relevant features that are absent from a casual conversation between close friends on vacation, for example.

Silverman explains that institutionality arises through how the parties adapt or modify the turn-taking system, thereby providing the baseline for any interaction (Silverman 1998: 161-182). Drew and Heritage identified three dimensions of institutional talk (Drew and Heritage 1992: 22-5):

(i) It is goal-oriented in institutionally relevant ways, so the conduct is designed to meet various institutional tasks or functions. For example, police answering emergency calls rapidly.

(ii) It is shaped by certain constraints. For example, the behaviour that is allowed in such institutions as a law court or a news interview. The rigidity of these constraints varies from institution to institution, and it also varies within the institution, at different stages of the interaction: for example, law court constraints may be harder to ignore than constraints in a medical consultation, and, as will be seen in Chapters 4-6 of this thesis, the constraints during the diagnostic stages of a medical consultation are more formulaic, and thus stronger than those during the prescriptive phases, where the doctor is freer to choose how much information to present to the patient and in what way.

(iii) It is associated with particular ways of reasoning or inference making. Thus, during the diagnostic process, a doctor would tend not to respond either positively or negatively (for example, keeping his/her tone of voice as flat as possible) as the patient reveals the information. This is so as to avoid invoking false alarm or false comfort in the patient before sufficient evidence has been assessed to make a confident diagnosis (Silverman 1998: 161-182).

In this way we can understand from the recording or the transcript of a conversation if it involves institutional talk, and if so, which institution the talk belongs to. Dimension (ii), constraints, suggests that some institutions are more formal than others. Thus, institutionality could be conceived along a *continuum of forms* as I depict below:

Formal ⇦ = ⇨Informal

Courtroom	⇔	*Counselling sessions*
Strict turn allocation		Usual mundane turn taking, but with mutual orientation to the tasks in hand.

In formal settings, we find specific reductions of the range of options and opportunities for action that are characteristic in conversation. They often involve specializations and re-specifications of the internal activities that remain. On the other hand, informal settings are less uniform since there is no 'overhearing audience' who might bear witness to any deviations from protocol. Also, in these settings, any asymmetries between the participants are not due to rigid turn-taking procedures that are enforceable by the institutional norms (such as exist in a court, where the witness must answer one question before the lawyer can ask the next one) (Drew and Heritage 1992: 22-5). This being the case, one might place medical consultations closer to the 'informal' end of the continuum. Ultimately, if we take this approach to all talk-in-interaction even the most 'mundane' talk could be conceived as being restricted to some extent by the setting. In this way prototypical examples of institutional talk, such as courtroom interaction would be more institutional by their overt reference to the setting, the characters and rules and regulations, whereas casual conversation between two strangers at a bus stop might display some predictable and formulaic interaction influenced by the particular setting, but it would not be predictable enough to be called institutional.

2.2.3 Phases of medical consultations

In Chapter 4 I examine the structure of the Japanese consultations I recorded, attempting to identify discrete phases which are characterized by particular discourse patterns such as question types, the relative amount of doctor and patient talking time, or the shift in turn-taking privileges. Here, I introduce the consultation structure by reviewing previous

studies. Researchers have defined the archetypical doctor-patient consultation in terms of distinct stages, or phases, approaching the consultation from a variety of perspectives: psychological (Neighbour 1999), functional/descriptive (Byrne and Long 1976; ten Have 1991), or prescriptive (Larsen et al 1997; Silverman et al 2005). Byrne and Long established the structure and sequence of doctor patient interactions by examining the behaviour ('consulting styles') the doctors exhibited during each of these phases (Byrne and Long 1984). This was followed by further studies (ten Have 1991; ten Have 1995; ten Have 1999; ten Have 2001; Larsen et al 1997).

These models represent a 'standard' consultation, which the authors have established by examining data from actual consultations and making generalizations to construct a complete set of phases of interaction. Consequently, in order to be understood as belonging to the genre of 'medical consultations' all doctor-patient encounters must contain some of these phases (e.g. it would be hard to imagine a new case consultation without the patient's presentation of her illness at the start). However, the unique circumstances of any particular consultation may mean that some phases never emerge, and can therefore be seen as optional (e.g. a 'standard' consultation includes the possibility of a physical examination, but there are many circumstances where the consultation is completed without one). Therefore, the structure and development of any given consultation is affected by a variety of reasons: the nature of the illness, which may be more or less apparent and therefore need more or less investigation or discussion; the impossibility of carrying out certain medical tests within the time available, the patient's reason for coming (for example, he/she may just want a repeat prescription), and so on. Also, these models seem to suggest a fixed order to the phases of the consultations in which the participants proceed in an inevitable sequence from beginning to end whereas, as discussed below, this is often not the case: in a given consultation an earlier phase may be returned to after a later phase as new information emerges.

Byrne and Long's model, which is based on an analysis of nearly 2,000 recordings of British general practice consultations contains six phases:

I. The doctor establishes a relationship with the patient;
II. The doctor either attempts to discover or actually discovers the reason for the patient's attendance;
III. The doctor conducts a verbal or physical examination or both;
IV. The doctor, or the doctor and the patient, or the patient (in that order of probability) consider the condition;
V. The doctor, and occasionally the patient, detail treatment or further investigation;
VI. The consultation is terminated usually by the doctor.

(Byrne and Long 1976: 21)

Each of these phases is associated with specific linguistic forms, according to the pragmatic nature of that phase. Accordingly, in the early stages of the consultation the doctor uses open-ended questions to allow the patient to introduce and develop information about her condition at her own pace and in her own words. On the other hand, the history-taking phase is characterized by closed questions, and the treatment phase would contain many declarative utterances. Having created these six phases, the authors then divide them into two super-ordinate categories: the diagnostic phases (I, II and III) and the prescriptive phases (IV, V and VI), which they characterize according to different behavioural styles that doctors use according to the degree of patient- or doctor-centeredness they exhibit.

These styles are arranged in a 'power-shift model'; they identify four styles in the diagnostic phases (Appendix 1a) and seven styles in the prescriptive phases (diagnosis, treatment and termination) (Appendix 1b) (Byrne and Long 1976:103-112). The authors stress that the doctors in their sample do not use any one of these styles exclusively:

> It must be emphasized that no doctor follows a particular style with any rigidity, but most tend to operate within two styles. Thus, a doctor who prefers to "gather information" will also be able to "analyse and probe". He will, however, show little evidence of any ability to move right across the range of styles to "reflecting". Equally, doctors who prefer to reflect show little interest in gathering information except when working under pressure of time. Another cause of a doctor moving his style in order to gather information is frequently an immigrant patient (or family) and the equally frequent language difficulty (Byrne and Long 1976: 103).

If consultations do have distinct phases that exhibit distinct discourse features, it follows that there must be clear boundaries between one phase and another. The possibility of two or more phases overlapping would undermine the whole basis of the model. Just as the principle of turn-taking allows only one participant to talk at a time, the idea of conversation phases would seem to necessitate clear phase boundaries and preclude participants from simultaneously being in more than one phase. Consequently, we would expect to see an utterance or some other behaviour signalling the end of one phase and the start of another. In other words, how the participants align themselves at conversational boundaries (Nofsinger 1991: 137-142). Mishler refers to these points of transition as 'topic shift' signals (Mishler 1984: 104) while Whitely (2002: 315) uses 'disjunct marker'.

Roter (2002) codes utterances into functional categories, which she places under two broad umbrellas: 'socioemotional' utterances that display feeling and understanding of the other person's position, such as personal remarks, social conversation, empathy, backchannel responses or showing agreement ('interactional' language, Brown and Yule 1983: 1); and

'task focused' utterances that are directly concerned with the clinical business at hand, such as giving instructions, giving information, transition words, paraphrasing or asking open- or closed-questions; 'transactional' language (Brown and Yule 1983: 1; Roter 2002). She defines "transition words" as 'sentence fragments that indicate movement to another topic or area of discussion, train of thought or action. This includes statements or fragments that are place-holders, if the utterance stands alone and is separated from other utterances by a pause of one second or more'. She includes the following examples of transition words in her analytic framework: *" Ah. . . wait a minute now. . ."; " Oh well. . ."; " Now. . ."; " Let's see. . ."* In this thesis such alignment signals will be referred to as 'phase transition markers', since much of the discussion of the structure of consultations (Chapter 4) relates directly to the kind of formal phase structure explained above.

Accordingly, when looking at a set of medical consultation data, how can alignment be recognised? One way is to look at the verbal and non-verbal signals that appear at those junctures. Maynard discusses an example of a topic shift sequence after one participant has delivered her good news to the other participant.

```
6  Ellen:   Uh:: [Tessa wuh (.) Tessa wz mated about uh:m
7           °tch °h two weeks ago:.
8           (0.3)
9  Marge:   Oh: ↓love[ly.
10 Ellen:             [So: if it's taken they should be heuh in
11          about six weeks b't ↓I dont' know yet've course you
12          cahn't tell, (.) until, °hh
13 Marge:   O[h h o w r e a]lly lovely.=
14 Ellen:    [about a month,
15 Marge:   =°hh Ez a matter've fact I was going to ↓ah:sk you,
16          °p°hhh eh:m (.) (.) is there anyone very reliable
17          thet does clipping ...
```

(Maynard 2003: 175)

We can see how Marge backchannels twice as Ellen delivers the news (lines 9 and 13), and, after surviving Ellen's overlap in 14, she takes her opportunity at the start of line 13 to lower her voice and give a longish sigh (°hh), then change the topic with '*As a matter of fact* …'. The backchannels do the minimum to show she has been listening and has understood the news, and once that work has been done, she can get on to her own issue with the doctor.

This concludes the introduction to institutional talk. I now return to consider the asymmetry of power between doctor and patient as an essential element of institutional talk in medical consultations.

2.2.4 Asymmetry in Doctor-Patient interactions

Specifically, what gives the doctor 'power' in the consultation? Various factors can be identified. Firstly, the doctor's institutional role as the keeper of knowledge – the patient

has come to visit the doctor as the expert; he/she is asking for help, and therefore he/she is putting him/herself in a passive role. Secondly, the doctor is the means to an end that the patient desires but cannot obtain by him/herself – the doctor is the gatekeeper and has the power to prescribe medicine or other treatment. Thirdly, the doctor is the timekeeper – the doctor decides when to move on to the next phase of the consultation and when the conversation will be over, not the patient. Fourthly, the doctor is on home ground – the consultation takes place in the doctor's room, so he/she is the host and the patient is the guest, and the role of the host is to attend to the guest's need so he or she takes the lead. Finally, the doctor is much more familiar with the structure of the consultation than the patient: he/she knows what needs to be accomplished in the time available and how it will be accomplished, (the different stages of the consultation and in roughly what order these stages will come).

Maynard (1991) identifies three types of asymmetry that appear with 'remarkable consistency' throughout the literature on medical sociology, ranging from the macro to the micro: *professional authority* (the doctor has the gate-keeping monopoly over therapy, surgery, prescriptions, insurance and sick leave, etc. so the patient complies with the doctor's advice whether he or she agrees with it or not); *socio-political structures* (doctors are either agents of social control operating on behalf of the capitalist class, or they are as subject as the patients to the 'discursive formations' that operate on all individuals who speak within a given field – so they can not avoid asymmetry); and *communicational structures* ('the patient's "voice" is stifled and silenced as the clinician asserts and reasserts the dominance and singularity of the clinical perspective') (Maynard 1991: 454-457).

However, Maynard observes that all three of these perspectives, in stressing the way that the participants 'do the institution', neglect to consider how they 'do the interaction'. In other words they over-emphasise the difference between mundane conversations and institutional discourse– a 'radical disjunction', or they see medical discourse as supplanting everyday language (ibid 457). To reign in the analyst's urge to make such a stark distinction, he suggests analyzing medical discourse using a strategy noted in mundane conversations – the 'perspective display series' (PDS) – that need not be interpreted in terms of asymmetry. In a PDS one party solicits another party's opinion then produces a report or assessment in a way that takes the other party's opinion into account. A PDS is composed of three turns: the perspective display invitation (opinion query); the reply; and the asker's own report. Maynard's particular interest is in the delivery of bad diagnostic news, so he discusses how a PDS can be used by the doctor to elicit the views of the patient before reporting the clinic's findings:

Inbuilt features of the PDS, in particular, its way of setting up a hospitable

> environment for the telling and its exhibiting the recipient's perspective as an embedded feature of a diagnostic presentation, handle various difficulties of the bad news experience (ibid: 467).

Finally, Maynard asserts that the PDS has a concentrated distribution in the clinical that it does not have in ordinary talk, thus making clinical encounters more predictable, but they may only be giving the appearance of incorporating the patient's perspective, whereas in fact, through the third stage of the PDS, the clinician asserts the clinical view (the voice of medicine), which may in fact contradict the position elicited from the patient. Hence the use of a PDS in clinical contexts is more manipulative than in everyday talk, and still rests on the assumption that the clinician ultimately has more abstract power than the patient (ibid: 484).

Ten Have (2001) suggests that power, in the sense of the relative turn-taking rights and topic management of the participants, changes during each phase of the medical consultation. Although the doctor has the initiative at the start of the consultation, during the second phase – discovering the reason for attendance – the initiative passes to the patient, since the conversation cannot proceed to the history-taking stage until the patient has revealed why he/she is there. So the doctor takes a passive role and has to wait until the patient has finished describing his/her complaint. After this phase the initiative is retaken by the doctor, who keeps it until the end of the consultation. Table 2.2 sets ten Have's phases of asymmetry alongside Byrne and Long's six consultation phases. Since my own study effectively divides this standard consultation into two parts (see §3.4.2), with the junior doctors (JDs) carrying

Table 2.2: Ten Have's asymmetry of initiative in a standard consultation

Consultation Phases (Byrne and Long 1984)	**ten Have's Asymmetries of Initiative** (ten Have 2001)
I. Relating to the patient (greetings)	D has initiative (D is the host; P is the guest)
II. Discovering the reason for attendance (Presenting a complaint)	D starts with the initiative, signalling his/her readiness to receive P's reason for visiting (*What's up*?) – initiative passes to P. P typically describes major complaints in 1 or 2 sentences, providing material for D's upcoming questions, thereby setting up D to take the initiative.
III. Conducting a verbal examination (Taking a history) and/or a physical examination	P loses initiative to D – take over by D's questioning. Slight tension between P wanting to tell his/her story and D following his/her professional agenda, checking alternative diagnoses. D receives P's information in a non-committal manner – 'Uhu' 'Okay' 'Yes')
IV. Consideration of the patient's condition (Diagnosis)	D has initiative – discussing his/her conclusions at length, & seeming to require acceptance by P
V. Detailed treatment or further investigation	
VI. Termination	D has initiative – making arrangements, well wishes, thanks and greetings (medical framework is loosened up leading to social leave-taking as host (D) accompanies guest (P) to the door).

out Byrne and Long's phase II and senior doctors (SDs) carrying out the prescriptive phases, if ten Have's framework of asymmetries of initiative is correct we would expect to see thepatient taking more initiative in the JD consultations and the doctor taking more initiative in the SD consultations. The evidence from my statistical analysis of the proportion of patient utterances in §5.5.3 seems to suggest that this is indeed the case.

Clearly, Table 2.2 depicts a simplistic pattern of power asymmetry during the consultation, since even during the phases where the doctor has the initiative the patient may interrupt, contradict or even fail to pay attention to the doctor. That caveat notwithstanding, during most of a consultation the doctor has more turn-taking rights and more ability to initiate topics than the patient and the doctor's status is reconfirmed in every new encounter. The question is, how does the doctor use this power to effect a clinical outcome that satisfies the patient? During the course of this thesis I consider how this is achieved in one Japanese medical setting by examining multiple examples of actual (recorded) consultations.

2.2.5 Backchannelling and facilitating

As described above, in phase III power shifts back to the doctor as he/she attempts get the patient to give more detail about symptoms. Ten Have notes that the doctor 'receives information in a non-commital way'. However, even if the appearance is non-commital, the doctor's agenda here is to encourage the patient to give information that will be useful to making a diagnosis. How do doctors elicit information from the patients, and how do they allow or encourage the patients to elucidate their complaints or symptoms? Backchanneling and facilitating are a crucial element of this process. As I explained in §1.2 backchannels are brief responses by the listener indicating involvement in the interaction, understanding of what the speaker says, and signalling that the listener does not wish to take the floor. Nofsinger, in his discussion of alignment, distinguishes backchannels, or *continuers*, from *newsmarks*. The latter are expressions that 'specifically treat a prior turn's talk as news for the recipient rather than merely informative' e.g. '*really?*'. On the other hand, continuers are a category of part two AP responses from the listener to indicate to the current speaker that he or she will not self-select as the next speaker at the TRP, therefore allowing the current speaker to continue and construct multiunit turns. They often overlap the end of one turn unit and the beginning of the next – therefore forming a bridge (Nofsinger 1991: 117-121),

Silverman et al's (2005) idea of '*facilitative response*' explains how the doctor actively encourages the patient to continue their story-telling through verbal and non-verbal behaviour (79-84). They note five types of verbal responses from the doctor: *silence* (pauses), *repetition* (echoing), *paraphrasing*, *sharing your thoughts* (allowing the patient to understand the reasoning behind a (usually closed) question the doctor is asking, and allowing the patient

to answer and elaborate more than if he/she did not understand the doctor's line of reasoning) and *encouragement*. Encouragement refers to backchannelling behaviour – signalling to the patient to continue their story (e.g. "uh-huh", "go on", "yes", "um" and "I see"). Similarly, Roter defines backchannel responses as 'indicators of sustained interest, attentive listening or encouragement emitted by the physician when he or she does not hold the speaking floor (" *Mmm-huh." " Yeah." "Right."*). In this case backchannels would not be regarded as separate turns. They are differentiated from utterances in that they do not serve to take the floor from the speaker. They are usually the almost inaudible "under-talk" that accompanies the other participant's story (or monologue), encouraging the speaker to continue talking or signifying the listener's continued interest in what the patient is saying. Backchannels also implicitly function as expressions of agreement and conceding a point.

In this section, through a review of previous studies, I have shown that doctor-patient interactions exhibit features of institutional talk, one aspect of which is the asymmetry of power between the doctor and the patient. This underlying asymmetry manifests itself in the verbal and non-verbal behaviour of the participants. In the next section I shall consider how, in addition to these institutional factors, national cultural influences also affect doctor-patient interaction. An important aspect of my investigation will be to determine the interaction between these two influences through the talk-in-interaction of the participants.

2.3 The effect of culture on interpersonal communication

2.3.1 Cultural differences in the style of consultations

The model of doctor-patient consultations introduced in §2.2 is based on research carried out in mainly English speaking settings. However, much research has been carried out into the influence of specific cultural settings may have on interpersonal communication, including doctor-patient consultations. For example, Lee et al (2007) found that compared to US students, Asian (Singaporese) medical students had a low propensity to view the D-P relationship as a partnership, which they suggest may be due to differences in cultural norms of D-P interaction in the respective societies. Also, Lamiani et al (2008) in a study of Italian and American health care professionals concluded that the concept and practice of patient-centred care is variable (the Italian group 'demonstrated amore implicitly paternalistic approach') and may be influenced by culture. Meanwhile, regarding styles of medical education, Jippes and Majoor's (2008) study of differences in the prevalence of integrated and problem based learning (PBL) curricula at 134 medical schools in 17 European countries, found there was a negative correlation between the percentage of integrated courses in a

given country and that countries relative power distance and uncertainty avoidance (two of Hofstede's dimensions of culture, explained in §2.3.2.1). So, countries with high power distance and uncertaintly avoidance were less likely to use a PBL curriculum.

In this section I argue that culture affects the conversation style of medical consultations. Specifically, the norms of doctor-patient interaction are dictated not only by the culture of the particular institution (the medical consultation) but also by the culture of the speech community at large (e.g. 'native Japanese speakers' or 'native British English speakers') in which that institution is itself located. In other words, a British D-P consultation is likely to exhibit different features of interpersonal communication than a Japanese one because the social relationships and between the members of each of these national speech communities are different. Therefore, members of each speech community may utilise different pragmatic strategies even in the same institutional setting. Research has been carried out on Japanese and English cross-cultural pragmatics, most notably with a regard to devloping pragmatic awareness as part of second language learning curriculum (Kaspar and Rose 2001).

Some studies of doctor-patient communication have highlighted the effect of cultural differences. In an Australian study of the effect of medical students' ethnicity on consultation skills Liddel and Koritsas (2004) found that non-Western born students placed more emphasis on communication skills than Western born students. Recognising that cultural norms are likely to influence D-P communication Skelton, Kai & Loudon (2001) provide a list of five questions that should be debated by educators when considering communication skills training in non 'western' settings:

(i) how can we understand 'general principles in other cultures that avoid descending to caricature?

(ii) can such features as 'patient-centredness be transferred from culture to culture?

(iii) how important is it if a doctor is not a native speaker of the majority language of country in which s/he practices, and how can translators best be used?

(iv) what can learners and educators learn from the study of metaphors of illness across cultures?

(v) how should communication skills teachers present materials in a culturally diverse environment?

Schouten and Meeuwesen (2006) surveyed the literature on cultural influences in medical communication from 1974 to 2004. They reviewed 14 studies (video aor audio recorded) involving intercultural communication between doctors and patients, finding that doctors behave less affectively when interacting with ethnic minority patients compared to

white patients. However, most of the 14 studies did not assess the effect of cultural variations in D-P communication, leaving no explanation for these intercultural differences. They conclude:

> … the extent of gaps between intercultural medical communication, its origins and the relationship between cultural variations in medical communication and health outcomes are still near unexplored topics for research. Far more empirical research on the topic is needed … [W]e need to ask ourselves which aspects of doctor-patient communication are universal and which aspects are culture-specific, as culture adds just one more dimension to an already difficult communication situation Schouten and Meeuwesen (2006: 32).

This thesis addresses Schouten and Meeuwesen's call to action by providing empirical evidence to describe one culturally-specific setting: the Japanese D-P consultation. By describing the interactions in the recorded Japanese data it should be possible to show which aspects are universal (i.e. conform to the consultation models described in 2.2), and which aspects are Japan specific. The study does not assume a deterministic Whorfian view of the effect of language on culture, but it does argue that the use of language for communication is affected by the culture of the language users, and that an analysis of any recording or transcript of a piece of talk in interaction will therefore be incomplete without a understanding of the cultural milieu that it comes from. In order to detect Japanese cultural influences in the conversation it is necessary to understand what kind of thing Japanese culture is. In section 2.3.2 I establish a definition of culture; in section 2.3.3 I consider how culture manifests itself through communication styles; in section 2.3.4 I review theories put forward to explain Japanese culture; and in section 2.3.5 I review comparative studies of Japanese and English communication.

2.3.2 Defining 'culture'

Agar (2007) argues that language is inseparable from culture, showing that the choice in German of second person pronouns *Du* or *Sie* is fundamentally dependent on 'generational, political and lifestyle issues' Agar (2007: 17). He characterises 'culture' not as mere characteristics of a group, but as something that is an integral part of any individual:

> Culture is no longer just what some group has; it's what *happens to you* when you encounter differences, become aware of something within yourself, and work to figure out why the differences appeared. Culture is an awareness, a consciousness, one that reveals the hidden self and opens paths to other ways of being (ibid: 18).

Thus, culture is not inherited; an individual's culture is the result of his/her upbringing in a particular environment that has specific values, norms of behaviour and social institutions (political, educational, religious, etc.) that have emerged and evolved over time.

Culture is the result of social practices developed and consolidated over time. Groups

of people living and working together in the same environment develop their own styles of behaviour and language, which all the members learn and have expectations about (they form a 'speech community' – Fasold, 1990: 40-42). This allows them to interact appropriately and effectively in the given situations. Cultures and the speech communities that emerge from them may be institutional, (office, doctor's surgery or court of law), national (the citizens of a nation state), social (hobby groups, academic societies), political or economic (working class, middle class). Participants learn and exhibit practices specific to that framework, and while in that environment they follow particular norms of interaction. Communication between two people is more effective when they have a mutual understanding of the same cultural norms; a particular action by one person thus sets up the expectation of a predictable (preferred) reaction by the other party. Finally, in the course of our daily life we participate in a variety of cultural groups, each of which has evolved from a distinct set of geographical, historical and social factors.

Some cultures are transitory and may develop to only a very superficial degree so that they barely register as having any distinct social identity at all. Others may develop over centuries and acquire a degree of sophistication and specialisation that distinguishes them markedly. An example of a fairly transitory culture might be a family, where the norms of interaction are influenced by family size, ages, relationships, hierarchy, economic status, educational background, beliefs, expectations and past shared experiences, and so on. Each family has its interpersonal dynamics and styles of behaviour, even though they may be so influenced by the wider geographical and social setting in which it is situated as to be barely distinguishable from this without careful anthropological observation. Less transitory, and more distinct are institutional cultures, such as in business culture, where the norms of interaction between colleagues, customers, clients, colleagues, bosses or underlings, and the manifestation of such norms identify individuals as such. Medical encounters are institutional, since doctors and patients have specific and mutually understood expectations of each other.

National cultures are even more developed and less transitory than institutional cultures: citizens of a nation-state have similar and mutually understood values based on the country's geography, history, political and social institutions, its heroes, its rituals, the development of its language, and so on (Hofstede, 1997). National cultural values are reinforced formally by the education system, the legal system, and informally through literature, the media and interpersonal relationships. Modern communications technology and the increasing flow of migration between regions, countries and continents adds another aspect to the continuing evolution of national cultures, but just as languages survive and

evolve though language contact, so does culture. The deeper and the more entrenched cultural values are within a social group, the less likely they are to be displaced; global influences are incorporated into the national cultural framework.

One culture is therefore discernable from another by the norms of behaviour understood and exhibited by the individuals who operate in it, and since the practices and values each culture have developed in their own way over time and they are learned and further developed by new members, it is clear that the norms of interaction of one institutional culture will be different from that of another (hospital culture versus school culture), and in a similar way, the norms of social interaction of one nation will differ from that of another.

As individuals we understand and operate in different cultural frameworks on a daily basis – service encounters, institutional encounters, social encounters, familial encounters or interactions with fellow members of our religious or sporting affiliations – and, as we go through the day, we adjust our behaviour, including our discourse to establish our identity within each of those frameworks, where we have the background knowledge, or in opposition to them when we do not (as non-members of the specific cultural framework). Our identities are therefore established and maintained through social interactions and a given interaction may have a variety of cultural aspects – familial, institutional, religious or national.

Our knowledge of any particular culture varies according to our experience of it – a child learns that the communication strategies he or she uses routinely in the family setting will not bring about the same results when he or she interacts with other children and adults at kindergarten. The more established the social framework is, and the more familiar we are with its rules and expectations the more we see it as 'natural' or 'normal', and the more alien other cultures seem. So, when we move out of our usual national culture our ability to interact effectively in the new culture is diminished by our lack of understanding of its social practices and values. Actions that result in predictable reactions in our home culture may have unpredictable results in the new setting. The reason for this lies in the disparity in the underlying values of the two settings, and for this reason national culture is as real and discernable as any other kind of culture. So how can national cultural values be measured or understand?

2.3.2.1 Measuring cultural differences

'Culture' was originally used in English to refer to animal or plant production (hence agriculture), but its scope of reference has broadened to encompass a range of social activities and institutions. The word can refer to the improvement of the mind through learning (hence 'cultured upbringing'); it can be a general reference to 'the Arts' (hence 'high'- and 'low'-

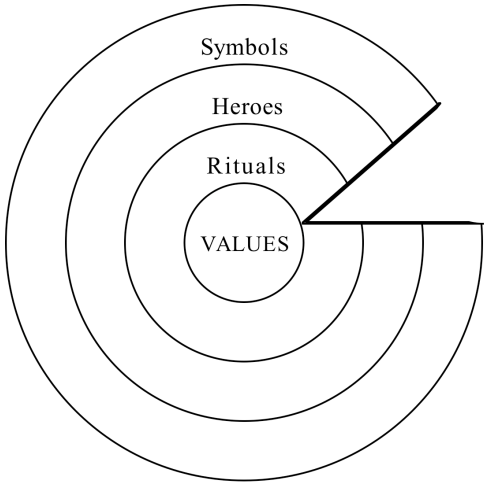
culture, or 'Ministry of Culture'). Both of these definitions are what Hofstede calls 'culture one' Hofstede (1997:5). On the other hand, it can refer to a group psyche, as expressed in the following definition:

> the shared patterns of behaviors and interactions, cognitive constructs, and affective understanding that are learned through a process of socialization. These shared patterns identify the members of a culture group while also distinguishing those of another group (CARLA 2007).

Hence, 'business culture', 'institutional culture', 'gay culture', 'British culture', 'Western culture' and so on. Hofstede calls this sense of the word 'culture two':

> the collective programming of the mind which distinguishes the members of one group or category of people from another. Culture is learned, not inherited … Culture should be distinguished from human nature on one side, and from an individual's personality on the other (Hofstede, 1997: 5).

Culture two is readily comprehensible in the abstract, but in practical terms any description of the culture of a group or society would have to include every aspect of human life there[14] in order to understand its 'values[15]'.



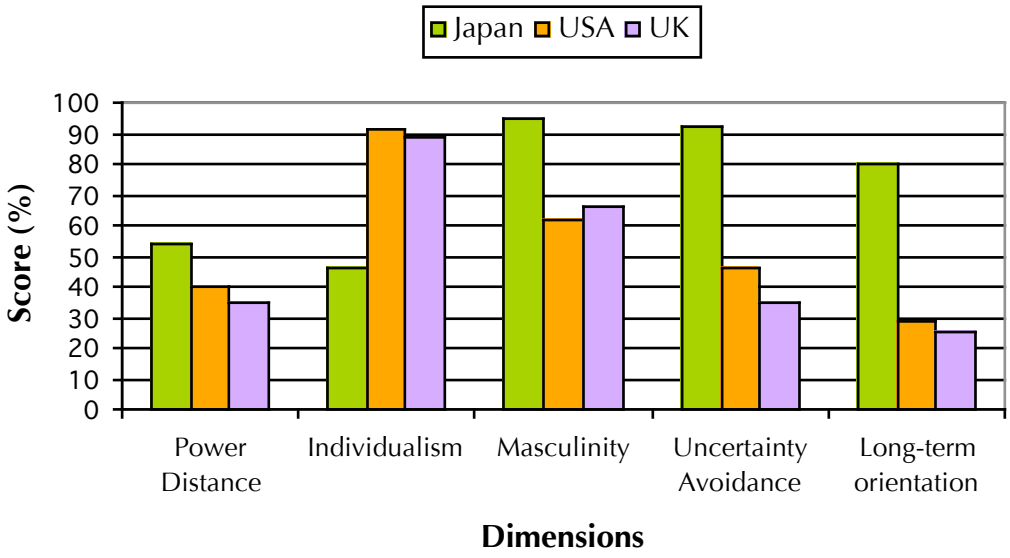
This makes empirical investigation of a given culture somewhat problematic: if cultural values are a kind of mental representation of the national psyche, how can they be observed or understood in a concrete way that avoids crude stereotyping? Hofstede argues that we can capture the values or belief system of a culture by looking at concrete aspects of the people who make up that society; its symbols (including words), heroes and rituals (including greetings, and paying respect) (Hofstede 1997: 4~9). He investigates five

[14] Recent discussion of multiculturalism and the idea of 'Britishness' in British society has shown just how difficult it is to describe a nations values in concrete terms, and it has prompted the nation's leaders to call for a national debate on the topic (http://news.bbc.co.uk/2/hi/uk_news/politics/4611682.stm).

[15] As examples of values Hofstede gives: evil vs. good; dirty vs. clean; ugly vs. beautiful; unnatural vs. natural; abnormal vs. normal; paradoxical vs. logical; irrational vs. rational.

'dimensions' of national cultures based on a survey of the attitudes of IBM employees in 53 countries, ranking each of the countries according to each of these dimensions: *power distance* (how egalitarian the society is); *individualism* (vs. collectivism); *masculinity* (the degree of division of gender roles: in +masculine societies men are assertive and women take care of relationships, whereas in –masculine societies gender roles are less defined); *uncertainty avoidance* (how much life is regulated to make it predictable and routine); *Confucian dynamism* (the degree of long-term orientation in a society). Table 2.3 compares the scores for Japan, the USA and the UK across all five dimensions.

Table 2.3: Ranking of Japan, USA & UK according to Hofstede's 5 cultural dimensions



(Data sourced from Hofstede 1997: 26, 53, 84, 113, 166)

Table 2.3 shows that Japanese society differs from the two Anglophone nations in being slightly more hierarchical and much more collectivist, having a greater division of gender roles, placing a greater emphasis on regulating and reducing uncertainty, and being more long-term oriented (valuing persistence, ordering relationships by status, and having a greater sense of shame (ibid: 165). The value of Hofstede's study is that it provides an empirical basis on which to measure national cultural values. It compares attitudes by IBM employees who are 'similar in all respects except nationality' (ibid: 13), and the questionnaires were identical across all 53 countries. Therefore, the IBM employees can be seen as a microcosm of the societies they live in, and their collective values represent the collective values of their respective nations.

However, there are some problems with this research. The cultural context in which the questionnaires were completed may have affected the way in which the questions were

interpreted, so the answers may not have been directed towards the same ends (e.g. 'individualist culture' respondents answering as individuals; 'collectivist culture' respondents answering as group members). Also, the data was collected in 1974, and in the intervening thirty years economic globalisation, increase in tourist and business travel, economic migration and the revolution in information technology have all had a huge impact on national cultures. Another problem is that it gives mean scores for each country, allowing over simplistic cultural stereotyping, which is of limited value when considering individual values and interpersonal communication. On this point, Scollon & Scollon (2001) write that making broad stereotypes about national cultures results in the creation of a false dichotomy:

> … cultures tend to be very large groupings with many internal sub-groups. There is hardly any dimension on which you could compare cultures and with which one culture could be clearly and unambiguously distinguished from another. (Scollon and Scollon 2001: 174).

Therefore, in an attempt to avoid cultural stereotyping the authors argue that when it comes to analyzing the effects on communication between participants from different cultures, instead of looking for general cultural features we need to focus on particular features of communication, and establish that these participants do indeed have different strategies, which are culturally determined (ibid: 175-6).

2.3.3 Culture and interpersonal communication

According to Fisher and Todd (1993) national culture influences interpersonal communication through the shared world view of the participants, and clearly this extends to medical encounters: "cultural (or meta-structural) arrangements play a major role in any medical system" (Fisher and Todd 1993: 5). They say that cultural values will show up as structural and organizational extensions of the (institutional) context, specifically through the medical discourse itself, but they warn that "mapping doctor-patient communication becomes increasingly difficult as we escalate the levels of abstraction from the interaction and organization to structure and culture" (ibid: 6). Hence, when looking at the Japanese context, such features can be taken into account as the paternalistic nature of doctor-patient relationships described by Munakata (1986) in his consideration of the differences between Japanese and American doctor-patient relationships:

> Generally speaking, Japanese interpersonal relationships are characterized by an effort to minimize psychological distance between the interacting individuals. They do so by repressing their personal opinions and interacting frequently with each other for the purpose of establishing emotional ties before anything else (Munakata 1986: 375).

In an asymmetrical relationship where there is a leader and a follower (e.g. manager and subordinate, or teacher and student) the follower gains the leader's heart (the emotional

tie) and the leader gains influence over the follower by providing help or advice, thereby instilling a sense of obligation in the follower. Hence, in a Japanese doctor-patient relationship, patients

> develop the kind of dependency on their doctors that children feel toward their mothers, and since Japanese doctors try to respond to their patients as if they belonged to the same family, they end up assuming the entire responsibility of treating and caring for their patients. Consequently the doctor in charge often tries to have the last say in everything, even in matters that essentially concern nurses and caseworkers. He will, furthermore, feel a sense of guilt if he cannot fulfill this responsibility. Usually the doctor will avoid explaining anything unless he is absolutely certain (ibid: 376).

Medical training in Japan has moved on since 1986, yet this behaviour, especially the avoidance of explaining information, lingers on (§3.4.1). In addition, a lack of explicitness by both parties (caused by the desire to avoid guilt by having to say 'no' to some request) means that the patient has to guess the limits of what the doctor can do, while the doctor has to guess the wishes of the patient. This obviously leaves much room for confusion:

> Japanese doctors are motivated by their desire to protect the patients and their families as much as possible from the loneliness, alienation, powerlessness, and hopelessness that might result from the knowledge of the terminal nature of their illness or the social prejudice associated with it (ibid: 377).

Thus, while the American doctor explains as much as possible about the illness and the treatment options to put the patient in a position to make his/her decision about how to proceed, the Japanese doctor is more directive[16]. However, to what extent is Munakata's claim borne out in real life situations? To what extent can instances of directivenes by a Japanese doctor be accounted for by 'national culture', institutional practice (medical culture), by individual differences (doctor's personality) or by the specific aspects of a given consultation?

2.3.4 Culture and Japanese communication

2.3.4.1 Nihonjinron and the myth of Japanese uniqueness

A body of literature has grown up explaining Japanese culture, known as *Nihonjinron*, and based on the idea that the Japanese are homogeneous and unique in their attitudes, their social institutions and their interpersonal behaviour. It ranges from scholarly studies by anthropologists (Benedict, 1949), historians (Reischauer, 1978), journalists (Van Wolferen, 1989) or psychologists (Lebra, 1976, Doi, 1973). Nihonjin works have been criticised for their lack of academic rigour, with their outdated and stereotypical presentations

[16] The image of doctor as an all-powerful oracle is by no means unique to the Japanese context: cf. West's (1993) on attitudes to doctors in the USA in the 1970s (see §2.2.1). Even so, In this section I wish to draw attention to specific aspects of Japanese interpersonal behaviour that might make consultations tend towards the guidance-cooperation model.

of Japanese society, as being naïve and misguided attempts at othering Japan (Mouer & Sugimoto, 1984; Dale, 1986; Guest, 2006).

One of these studies (Lebra, 1976) is directly relevant to interpersonal communication, so I shall summarise it here before considering criticisms of nihonjinron as a whole (#2.3.4.2). Lebra takes certain Japanese words and examines their etymology on the assumption that 'the original meanings are still associated with the words and that the words accurately reflect social norms about proper social relationships'. The Japanese are 'extremely sensitive to and concerned about social interaction and relationships', and a person's behaviour is 'a result of interaction and mutual influence between him/herself and his object'. On this basis Japanese society is characterised as one of 'social relativism' (ibid: 9), having five components: *Belongingness (uchi/soto); Empathy; Reciprocity; Occupying the proper place*; *Dependency.*

Belongingness (uchi/soto) refers to being part of a particular group in society (a company, a student club, etc.). One aspect of belongingness is that for in-group members 'physical togetherness tends to dispel the need for verbal communication' (p 28). *Empathy* is the ability and willingness to understand others' feelings and help satisfy their wishes. It is concerned with maintaining harmony between individuals, so in a conversation a speaker will not assert him/herself unless s/he feels that the hearer shares his/her opinions. Hence, many utterances are deliberately ambiguous to avoid threatening the addressee's 'face'. *Occupying the proper place* (social hierarchy) is formalized linguistically by polite forms (*keigo*) used according to the social relationship between the speaker and the hearer. *Reciprocity* is the interrelated social aspects between two individuals, and it is concerned with duty and obligation. *Dependency* is classified into four types: dependency on patronage (when two people are unequal in status, the inferior (*kouhai*) becomes dependent on the superior (*sempai*) for help and support); dependency on attendance (a superior depends on an inferior to take care of his personal needs); dependency on indulgence; dependency on pity (based on the speaker's pity for the hearer's plight, which is aroused through empathy) (ibid: 50-6). *Amae,* variously translated as 'dependency' or 'sweet dependency' (Yamada, 2002) has been written about in much detail by the Japanese psychiatrist Takeo Doi (1973).

2.3.4.2 Criticism of Nihonjinron

Mouer & Sugimoto (1986) challenge the idea that Japanese society is uniform and governed by consensus. They explore four well-known and frequently cited nihonjinron works written by established academics at renowned universities. Doi (1973); Nakane (1973) on the contrast between the vertical /hierarchical ties and group solidarity in Japanese society and the horizontal/egalitarian ties and individualism in the Western setting; Vogel (1979) on

the role of Japan's special group-orientation in mitigating the effects of rapid industrialization; and Reischauer (1978) an anthropological study of the Japanese people. They show that these nihonjinron theorists rely heavily on anecdotal evidence, or make generalisations from studies of small sub-groups - 'sampling problems', display a lack of clarity in the concepts they use - 'conceptual ambiguity', and a lack of concern with methodology. They conclude 'there seems to be a simple assumption that the Japanese do not have individual personalities and can be treated as cogs or replaceable parts in a much larger social machine' (Mouer and Sugimoto 1985: 129-155). Poor scholarship expounding the idea of Japanese uniqueness is used both by extreme domestic nationalist groups and by foreign Japanophiles promoting romanticised images of the exotic East. Also, Leflar, (1996) in his examination of the introduction of informed consent into Japanese medical practice attacks the image of Japanese society as a homogeneous mass, pointing to the tension between paternalism and democracy:

> Japanese society is often depicted by naïve Western observers, as well as by Japanese proponents of an intrinsic Japanese national identity, as a homogeneous monolith. The debate over informed consent illustrates how misconceived is this monolithic portrayal. The debate is a reflection of value tensions within the society. The movement for informed consent and patients' rights connects with the drive for participatory democracy in Japan as it has elsewhere. The campaign's watchword of "transparency" is a call for openness in decisionmaking in the sphere of health care as well as in that of politics (ibid: 110-111).

Dale (1986) makes a strident attack on nihonjinron. He argues that these texts should be treated as a mythical system that presents the Japanese as: 'a culturally and socially homogenous racial entity, unchanged from prehistoric times', who 'differ radically from all other known peoples', and who are 'consciously nationalistic, displaying a conceptual and procedural hostility to any mode of analysis which might be seento derive from external, non-Japanese sources'. His chief concern is the nationalistic element of such works. Dale seeks to undermine the idea of the Japanese as a unique people among the peoples of the world, and his arguments are damning in their detailed destruction of many clichés about the Japanese: the apparent intranslatability of some Japanese words, the myth of Japanese reticence and taciturnity, the 'shame culture', and the myth of the 'unique symbiosis of social relations' in business and public life (Doi's *amae*).

Dale characterises Doi's *amae* as a 'social striving' for the unity of self and other that existed between mother and child: the 'primal sense of unity', that is penetrated by the patriarchal structure of the social world. The feeling of uniqueness engendered by the mother-child relationship is 'reconstituted' by identifying the self with the group. He discredits *amae*

as:

> a bungled attempt to reclaim the lost ground of that infantile phase of primary socialisation by analysing the repressive socialisation which follows and reverses it, as in fact its natural outgrowth or consequence (ibid: 141).

Amae denies a person's ego in order to 'pretend oneself away from one's original self' and take on the identity of the group, which Dale takes to refer to the Japanese nation.

Dale's main attack is on Doi's principle that *amae* and other Japanese terms cannot be fully understood or translated (e.g. into English), because they are culturally specific. Yet this is an odd attack, since any word in any language has evolved to describe a concept in the speech community, which all members understand and have a feeling for, but that non-members may not. Therefore, the more culturally embedded a word is, the more difficult it is to capture its full sense in another language. For example, 'stiff upper lip' describes a powerful cultural stereotype for British English speakers, hinting at a plethora of images from British history and literature, familiar to everyone who has grown up in the culture. To capture all the feeling that this word evokes in Japanese requires more than a simple translation of the word itself; examples and background information also need to be given. Similarly, it is difficult to capture in Japanese the meaning of slang such as 'naff' or 'codswallop' or the whole range of English swearwords, which have their own restrictions and subtleties of usage. Therefore, contrary to Dale's argument against deriving cultural meaning from particular Japanese words that are difficult to translate into English (due to their cultural associations), it may be argued that the inspection of such words reveals much about the relative cultural values of these two speech communities.

2.3.4.3 Japanese culture beyond Nihonjinron

Dale's destruction of the myth of Japanese uniqueness allows us to understand Japanese culture as being no more unique than any other, but also no less unique than any other. The culture and language is a product of the history of the people, and it is the backbone of their national identity. The modern Japanese language is the product of contact with China from the 7th century, which led to the adoption of Chinese orthography (kanji), from which were developed the two syllaberies – katakana and hiragana. The scripts all have their own distinct functions, but they are often used creatively in advertising, in magazines, on labelling, and so on. This complex and cumbersome orthographic system was not planned, it has evolved – no rationalist language planner would have imposed such a system from the start. The modern Japanese lexicon is composed of 53% native-Japanese words, 41.3% Sino-Japanese words and 3% western loanwords (Kaiser, 1998).

Linguistic differences represent cultural differences, and language use depends on the

cultural values of the speech community. It would therefore be unreasonable not to expect differences in styles of interaction between Japanese and English medical consultations. A precise study of turn-taking and utterance choice in a set of authentic data of Japanese consultation should therefore reveal the attitudes the participants have towards each other, and therefore tell us somethng about their cultural values. While nihonjinron may have created absurd caricatures of Japanese group psychology, this need not lead us to the conclusion that it is meaningless to talk of such a thing as Japanese culture. Moreover, if there are patterns of interpersonal interaction that are distinct in Japanese society they should be detectable through the behaviour of the people, most notably through their language use.

Hayashi (1996) discusses the relationship between the individual and society in order to establish how best to link micro-findings (analysis of the language of individual interactions) and macro-interpretation (indicating aspects of the culture or society in which the interaction takes place). In the introduction to her book on floor management in Japanese and English conversations she explains the micro-macro link in the analysis of conversations as follows:

> … even though we sometimes need to isolate components for analytic and explanatory reasons, there are cases in which we can observe conversational interactions more holistically by not isolating them. Furthermore, there are some phenomena which do not require isolation, and sometimes interactions are misunderstood if components are isolated in the wrong way (ibid: 2).

A purely qualitative discourse approach that gives a detailed description and interpretation of a particular situation, runs the risk of being no more than a 'descriptive sketch of the phenomea' and an attempt to transform the micro to the macro 'may result in unfair overgeneralization' (ibid: 6). A valid method of research would be to give explanatory primacy to the individual and analytical primacy to the society in which the individual belongs; individual behaviour is socially constrained while being made possible by social conditions. Therefore to understand individual behaviour it is necessary to give a detailed description of the context in which the individual operates. She draws on Fodor's (1983) idea of the modularity of mind to conceptualise how utterances are composed:

> … if we carefully investigate the modules individuals create and analyze in detail each module and how each module interacts with the others, some of the results we obtain may be linked to the macro. The findings are not a direct bridge to the social structure, but they can provide information that is less abstract and more comprehensible. To do so, both theories and models of analysis must be powerful enough to determine which phenomena are pancultural and which are particular to the individual, and good data are needed to that provide a source of micro-information to be linked to the abstract social structure (ibid: 9).

The ‘good data’ that Hayashi refers to are situations where one individual is with another, and thus interacting with him/her. Such situations require ‘the participation practices which are governed by the social matrix’ (ibid: 10). In other words, since the rules that govern a given social situation are unpredictable to interact successfully an individual must know the rules; he/she cannot rely on his/her intuition. Such rules, for example include those for dealing with people in dominant or subordinate social positions, rules for dealing with service personnel, or rules for friendly interaction. Therefore, studying multiple examples of similar individual interactions has the potential to reveal the social rules of the cultural context in which they are operating, whether it be familial, institutional, or the national society at large.

2.3.4.4 Ambiguity in Japanese communication

In this section I argue that one commonly cited feature of Japanese communication, ambiguity (Lebra, above), is mistakenly understood to have a linguistic basis (e.g. due to dropping the subject of a sentence), rather than being a product of language usage, which in turn is dictated by social relations between the participants (the culture). A number of studies have established that there are differences between Japanese and English communication style (Naotsuka and Sakamoto (1981) Mutual understanding of different cultures; Watanabe (1993) - cultural differences in framing; Okazaki (1993) - stating opinions in Japanese; Hayashi (1988) – Japanese use more sync (simultaneous) talk that Americans).

Culture is intrinsic to pragmatic understanding. For example, Shibatani (1990) writes:

> Japanese grammar offers a domain of pragmatic inquiry more inviting than that offered by English and other European Languages. [… because …] Japanese shows far more obvious variations in and restrictions on sentence form in relation to the context in which the sentence is used (ibid: 90-92).

Japanese sentences can seem quite unclear to non-Japanese learners of the language, and he sees two main sources of this ambiguity: (i) the dropping of grammatical elements; (ii) a heavy dependence on context. One of the main sources of grammatical ambiguity comes from the fact that in Japanese subject pronouns may be dropped, but unlike in other pro-drop languages such as Spanish Japanese verbs do not inflect for person or number. At first sight this would seem to give great scope for ambiguity regarding the subject.

However, while utterances in spoken Japanese may be ambiguous it would be wrong to attribute such ambiguity to the linguistic structure of the language. A subject that appears to be ‘missing’ may in fact be redundant because of the inclusion of a verb or a particle that makes an unambiguous reference to the agent. Each language is restricted by its linguistic system, so a required element in a sentence in one language may be an optional element in another language, without any loss of precision or clarity. Thus, in English the use of a definite article allows the speaker to specify a unique referent rather than any member of a

particular noun category (the table/a table), whereas in Japanese, which has no system of articles, such specificity has to be achieved through other means. On the other hand, in a Japanese sentence the lack of a pronoun does not in itself entail ambiguity whereas it might in English. Rubin (1998), argues that the stereotypical view of Japanese as being inherently ambiguous is simplistic and misleading:

> The Japanese *language* can express anything it needs to, but Japanese *social norms* often require people to express themselves indirectly or incompletely (Rubin 1998: 13).

In a Japanese sentence, a specific noun phrase indicating a subject may be absent, but other grammatical elements can compensate for this and make the subject clear to the hearer (25). Rubin takes the reader through a series of grammatical features that belie the belief that Japanese is somehow inherently ambiguous: post-positions (particles), verbs of giving and receiving, causative verbs and passive constructions. Here, I explain the first two features using my own examples.

(i) Post-positions (particles)

The following examples show how crucial the particles **wa**, **ga**, **wo** and **ni** are to the meaning of sentences.

a.	*(ryokou wa)* kaisha **ga** haratta.	*(Travel expenses)* paid by the company.
b.	kaisha **wa** *(hoteru dai wo)* haratta.	The company paid *(the hotel bill)*.
c.	kaisha **ni** haratta *(okane desu)*.	(*The money*) paid to the company.

All three sentences contain the noun `kaisha` (company) followed by the verb `haratta` (paid), but each time they are linked by a different particle, which changes the meaning. In each case extra information has been added (in *italics*) to make the context clearer in English, but in Japanese this information is unnecessary to make sense of the sentence: there is no ambiguity in any of the sentences because the particle indicates whether `kaisha` is the topic (wa), the direct object (wo) or the indirect object (ni).

(ii) Verbs for giving and receiving

When expressing a transaction between person A and person B three basic verbs are available: *ageru* (indicates the speaker is the giver), *kureru* (indicates the subject is the giver), *morau* (indicates the speaker is the receiver).

a.	*(Watashi wa okane wo)* Tanaka san kara moratta.	*(I)* received *(money)* from Mr. Tanaka.
b.	*(Watashi ni)* Tanaka san ga (*okane wo)* kureta.	Mr. Tanaka gave *(me money)*.
c.	*(Watashi wa okane wo)* Tanaka san ni ageta.	(*I*) gave (*money*) to Mr. Tanaka.

The verbs alone do enough work for the hearer to understand who is giving or being given something. As in (i) above I have added extra information (in *italics*) to make the context clearer in the English translations, but in Japanese this information is not necessary. Without

the extra information there would be no ambiguity: the hearer would know what is being given or received through contextual clues (the speaking situation), and he/she can identify the giver and the receiver by attending to the verb.

Shibatani (1990) explains how ambiguity is reduced by honorific expressions, which, for example, indicate the hearer or a third person by respect forms and indicate the speaker by humbling forms. Ambiguity is also reduced through the use of intonation to indicate the illocutionary force. Falling intonation means the illocutionary force is direct (the speaker is referring to his own feelings); rising intonation means the illocutionary force is indirect (the speaker must be referring to someone else's feelings) (ibid: 364).

2.3.4.5 Pragmatic aspects of Japanese communication

The main factor controlling the relation of the speaker to the discourse is the notion of (physical, social and psychological) distance. Distance is dependent on the context of the utterance, and Shibatani regards context as being the key to understanding how to communicate in Japanese:

> … the difficulty in Japanese lies not so much in learning its grammatical or phonological structure, but in learning the way in which an expression must be altered in relation to the context of speech' (ibid. 392).

While this comment is addressed at learners of the language, it emphasises the importance of contextual information in Japanese communication. Rubin has shown that Japanese can be clear and precise when the speaker requires it to be, so when ambiguity arises it is because the speaker chooses to be ambiguous in order to conform to cultural norms of interaction.

According to Bachnik (1994) 'Pragmatic meaning is far less obvious to the English-speaker than semantic meaning', since in English, and in Western culture in general (Bachnik traces this back to Aristotle), there is a 'strong tendency to focus on reference … that gives priority to the naming, referential denotative function of language (over such other language functions as the 'indexical')' (ibid: 11). By 'indexical' Bachnik is referring to the situational, and therefore cultural, context in which language is used; its 'situated meaning'. Therefore, 'cultural meaning should be viewed as having pragmatic rather than semantic meaning', and this is certainly the case for the Japanese (Bachnik 1994: 11). She explores such dichotomies as *uchi/soto* (inside/outside), *ura/omote* (obverse/reverse), *tatemae/honne* (rule, formality/truth, reality) or *giri/ninjo* (obligation/human feeling, kindness), which juxtapose speakers to each other according to their various social relationships and "context, which is partially constituted by such relationships" (ibid: 12). Consequently, she argues, there is great sensitivity to and preoccupation with this kind of indexing in Japanese society; the understanding of where we are situated in relation to the other party and sensitivity to such

features of context is essential in order to interpret ordinary Japanese discourse. English speakers are more used to indexing through deixis. Bachnik claims that *the* indexical reference point is *I*, to which all contextual references are related by deictic markers (here, there, now then, etc.), and as the speaker changes so does the deictic anchor. In this way '"socio-cultural information is keyed *implicitly* through language use"' (ibid: 13, citing Ochs, 1990: 291), and therefore the vast majority of this information must be inferred by the illocutionary force of the utterance – the manner in which it is said.

2.3.5 Comparative Studies of Japanese and English Conversation Patterns

One way of distinguishing Japanese and English communication styles is through the concept of *high-* and *low-context* communication, (Hall, 1976:85-103). High context communication is where most of the information (situational, historical, cultural and behavioural) is internalized in the speaker and in the hearer with only the most essential new information being contained in the explicit (verbal) part of the message. In other words an utterance indexes contextual cues that both interlocutors are aware of (because of their membership of the same discourse community), and without which the message would not be able to be interpreted. Japanese culture is held up as being a typical example of this style of communication. Therefore, more silences and longer turns would be expected, as the listener ponders what the speaker says within the given context. By contrast, low context communication is where most of the information is verbalized explicitly. American culture is held up as being a typical example of this style of communication. In consequence, we would expect more detailed information to be given by the speakers, less pondering and quick turn taking. Ohtaki et al draw on this high-, low-context distinction to explain the difference in the relative amount of social talk between doctors and patients in the American and the Japanese settings, although 'there is no research documenting that high-context communication in Japan or low-context communication in the USA leads to better clinical outcomes' (Ohtaki et al 2003: 281).

In order to set my own study in its research context I shall now review previous comparative studies of Japanese and English conversation patterns, focusing on silences and backchannelling.

Silences

In a conversation, when there is an extended silence the question arises over who has the next turn, so it would seem that the longer the silence, the more pressure there is on the participants. Goffman observes how silences are an integral part of conversation when it is considered as a social encounter:

'Throughout the course of the encounter the participants will be obliged to

> sustain involvement with what is being said and ensure that no long stretch occurs when no one (and not more than one) is taking the floor. Thus, at a given moment no talk may be occurring, and yet the participants will still be in a "state of talk."' (Goffman 1981: 130).

Thus, a silence should not be regarded as period of non-talk or non-interaction: like all other aspects of conversations pauses and silences are noted by the participants and thus affect turn-taking. Nofsinger distinguishes three types of silence: *lapses*, occurring during and after a transition relevance place (TRP) when no next speaker has been selected, so the conversation comes to a halt; *gaps*, brief silences (usually one second or less) at the TRP before a self-selecting speaker begins his/her turn (reaction time for the self-selector to read the TRP); *pauses*, silences within a speaker's turn. Pauses, in turn, may be divided into three sub-categories: pauses in mid-turn, caused by word searches or momentary distractions; pauses at a TRP when no speaker self-selects so the current speaker elects to continue; pauses at the end of a turn when the current speaker has selected another speaker, but there is a short silence before the selected speaker begins speaking – hence this silence belongs to the selected speaker; it is not a gap (Sacks et al 1974; Nofsinger 1991).

Lerner further unravels the first category of pauses ('intra-turn silences') in his discussion of unprojected opportunities for turn completion (Lerner 1996). Pauses near the start of a turn ('post-beginning') are more likely to be for self-repair, as they will not provide the recipient with enough information to make a completion. These are contrasted with 'pre-completion' pauses, occurring at a slightly later point in a turn and which do provide enough information for the recipient to make a completion. One type of post-beginning pause is a *word search*, where the recipient may enter, but he/she is strictly limited to filling in the searched-for word; it is not to be used by the recipient as an opportunity to produce a completion. Another type is a *word cut-off*, where the speaker starts one word, then cuts off in the middle of the word to self-repair, producing a micro-pause, allowing an opportunistic completion by the recipient (example p264). One other type of pause is a '*no-trouble*' silence, where the recipient understands that the silence has some deliberate function because of the setting (e.g. the recipient may be taking down some notes concerning the conversation, so the pause is understood as giving the recipient time to write something down.)

However, some writers report that silence differs across cultures, influencing communication style. Maynard (1997) notes that silence has a dynamic relationship with speech, as the existence of the former depends on the existence of the latter. Scollon sees American speech as a kind of perpetual motion machine: 'If one assumes the engine should be running, the silences will indicate failures. Smooth talk is taken as the natural state of the smoothly running cognitive and interactional machine' (ibid: 153) However, she states, citing

Lebra (1989), 'Silence for Japanese, then, is a communicative device that can express many intentions and feelings.' (ibid: 154)

Other writers are less sure of this distinction. Barnlund on the one hand writes 'The Japanese seem to hold words in lower esteem than do members of other cultures' (Barnlund 1989: 128). On the other hand he says that it is difficult to prove or disprove this, as silence does not lend itself to systematic study (p142). He also cites Millar (1982) on the subject: 'What passes for silent communication is no more unique or incomprehensible in Japan than in the United States. Does Japanese homogeneity, group-centeredness, and preference for harmony and consensus reveal itself in more intense reliance on physical forms of communication? Is this myth or reality, fiction or fact?' (Millar 1982: 85, in Barnlund 1989: 130). Barnlund's findings show that there is a cultural difference in the frequency of silence among close acquaintances, but overall his findings support the view that Japanese people do not use silence as an overt communication strategy. In other words he concludes that while silences are longer in Japanese conversations than in American conversations, this fact alone does not distinguish the two communication styles. Even so, in intercultural communication between Americans and Japanese, it would be easy to imagine how the Japanese tolerance for longer silences might put to useful effect in negotiations, where the American side might be inclined to fill a void by backtracking or even moving towards a concession[17].

Barnlund made a qualitative analysis of Japanese and American communication styles – 'a middle level between the microscopic level, focusing on a 'simple critical event', and the macroscopic level, 'seeking to identify the broadest norms that regulate social life' (Barnlund 1989: 46). His research took the form of a detailed survey of college students in Japan and America (423 Japanese and 444 Americans), and the goals of the inquiry were to gain a clearer view of the social norms of the two countries by seeing how people behaved with their close associates. The questionnaire had eight scales in which to examine behaviour, including measuring how respondents choose or reject potential friends, how they spend time with their friends, their use of verbal and non-verbal communication, or how they take responsibility for their friends or how they assimilate the traits of their speaking partners (Barnlund 1989: 47-8).

Barnlund suggests that in comparison with the Japanese subjects, the American subjects communicated their affection for each other via channels of non-verbal interaction, which he defines as the way time, space, touching, gift-giving, and silence were employed as alternative channels of communication (e.g. gift-giving, silences, touching and sensual

[17] Indeed, one manual aimed at helping Japanese businessmen negotiate with foreign associates recommends this based on his own experience. (Nakamura, 1998: 59)

expression). Cultural dissimilarity in modes of physical expression increases in the relationships between close companions (ibid: 144). He argues that nonverbal acts are more potent than symbolic behaviour (particularly words) as they are the prototypical way of relating to people in their infancy. Nonverbal acts are also important in Japanese society, because they allow communication to occur without threatening harmonious relationships. Outright disagreement poses a much more serious threat to human relationships than it does in the West and once a relationship is broken, it cannot easily be fixed again. Disagreement is verbal and explicit, while consensus and agreement is non-verbal, implicit, more ambiguous and therefore has a lower potential for provoking hostility. Hence meanings are often communicated without using words (ibid: 128-9).

Other comparative studies have been carried out by Senko K. Maynard. She examined the features of Japanese and American casual conversation (Maynard 1989; Maynard 1997). In her 1989 study, Maynard investigated Japanese casual conversation, by video recording 20 pairs of Japanese students (who were friends) and 20 pairs of American students talking to each other (see (Maynard 1989: 10-18, 204-5) for details of the data collection). Maynard's findings are summarized below with regard to (1) interactional management (turn-taking strategy and backchannel behaviour) and (2) contrastive conversation analysis between Japanese and American English.

Backchanneling features

Japanese backchannel responses occur frequently in Japanese casual conversation, occurring when there is a 'pause-bounded phrasal unit': (i) a grammatical completion (51% of the total), and (ii) a sentence-final particle (such as *ne*, *sa*, or *yo*) (41% of the total). Backchannels also occurred when the sentence final syllable is marked by a vertical head movement (this signalled/triggered 38% of all backchannels). A continuous flow of backchannelling facilitates conversation management and self-contextualization (the ongoing process of continually defining oneself in relation to one's environment) between Japanese speakers and listeners.

Contrast between Japanese and (American) English

The American conversations in Maynard's 1989 study produced far fewer backchannels than the Japanese conversations (428 compared to 871). 50% of American backchannels were brief utterances (such as *uh-huh*, *yeah*, and *right*), and half of these were accompanied by head movement. Meanwhile, brief utterances (such as *un*, *honto*, and *soo*) accounted for 70% of Japanese backchannels, and 63% of these were accompanied by head movement. 35% of American backchannels were head movements with no verbal output (compared to 19% of the Japanese backchannels). Finally, 15% of the American backchannels

were laughs (compared to 11% of the Japanese backchannels).

Maynard concludes that Japanese backchannel behaviour suggests the Japanese interactants possess a strong inclination for mutual monitoring and cooperation. The Japanese conversations also revealed an extraordinary high frequency of head movement, 'which' punctuates moments for pauses, providing more opportunities for backchannels' (p209).

Japanese-English Intercultural Communication

Maynard (1997) examines two intercultural conversations between two pairs of Japanese and American students speaking in English. Again, she notes that the Japanese students send backchannels more frequently than the American students, and their typical form of backchannelling is head movement, while the Americans prefer short utterances. Japanese students also use more head movements in general. Importantly, Maynard notes evidence for transfer of conversation strategies from Japanese into English:

> … both Japanese and American students conduct themselves in intercultural discourse much as they would within their own cultural context. Although this is a conclusion based on limited data and analysis, there is reasonable evidence to support the idea that listener response transfers across cultural boundaries and is relatively unaffected by the listener's identity. […] It is interesting to witness Japanese listeners sending backchannels in English at positions where, in Japanese, an interactional particle would appear. The Japanese person listening to English continues to behave as if listening to Japanese, at least in terms of conversation management (Maynard 1997: 213).

When Japanese learners of English use Japanese conversational management techniques in English speaking situations, it can make them seem too hesitant, too eager to please and too intent on hurrying the conversation along. The problem is that these factors can lead their native English speaking partners to associate these irritating factors with personality, rather than differences in conversation styles.

In 1992 I carried out a study of transfer of L1 pragmatic strategies into L2 by Japanese high school teachers of English who were attending an intensive English course at Edinburgh University (Holst 1996). My study was inspired by previous pragmatic studies of English and Japanese that used questionnaires asking respondents to write down what they would say when confronted by a series of face threatening situations (Blum-Kulka and Olshtain 1984; Beebe and Takahashi 1989; Beebe et al 1990). In the study I included situations involving refusals, requests and embarrassing comments that I gave to the Japanese teachers and native English speakers. I concluded that there was some evidence of pragmatic transfer, but that it depended on the situation. There was a tendency for Japanese respondents to expect individuals with +power to assert this power whether the situation was in English or in Japanese. I also noted that in one request situation (*a student asks a teacher for more time*

to do his homework) the English respondents were highly likely to use explanations or excuses to mitigate the FTA, whereas the Japanese respondents did not. The study was small and I was not satisfied that the questionnaire format was the best research instrument, but even so I felt that was a clear indication that the two groups of respondents used different pragmatic strategies in a given situation, which could be accounted for by a difference in cultural attitudes.

2.4 Diversity within Japanese culture: the nature of Japanese communication patterns in medical settings

In the opening to section §2.3.4 I explained how *nihonjinron* create an image of Japanese culture as monolithic and exceptional, and that such cultural stereotyping is a poor platform on which to base a serious academic study. However, in my subsequent discussion, I argued that national cultures do exist, and that there has been much research on the impact that cultural norms and values have on interpersonal communication, including differences between the communication styles of English and Japanese. This provides a basis on which to investigate Japanese communication in a specific conversation setting. Nevertheless, before proceeding to my study of patient-centredness in Japanese consultations I want to break down the cultural 'monolith' (Dale, 1986) in order to consider some social factors that may have an impact on the dynamics of individual Japanese consultations. I consider five factors: (i) the falling birth rate and the aging population; (ii) the rise in the number of doctors; (iii) the type of hospital; (iv) seeking a second opinion and (v) the informed consent laws.

(i) The falling birthrate and the aging population.

Latest statistics from the Japanese government (MIAC 2009) predict that by 2020 29% of the population will be over 65, compared to just 9% in 1980 (Table 2.4) and in 2008 declined to 1.29 per woman, which is partly attributed to the rising age of the average mother

Table 2.4: Japanese demographic trends 1980~2050 (predicted)

Year	Population	% Population aged 0~14	% Population aged 65+
1980	117,060,000	23.5	9.1
1990	123,611,000	18.2	12.0
2000	126,926,000	14.6	17.3
2008	127,692,000	13.5	22.1
Projection (as of December 2006)			
2010	127,176,000	13.0	23.1
2020	122,735,000	10.8	29.2
2030	115,224,000	9.7	31.8
2040	105,695,000	9.3	36.5
2050	95,152,000	8.6	39.6

MIAC (2009)

at first childbirth (25.6 in 1970 to 29.5 in 2008).

Researchers have established that in paediatric consultations, where the child is accompanied by a parent, it is important to make sure that all parties are involved (Ammentorpe et al, 2009), and patient satisfaction is connected with the amount of information the doctor gives about psychosocial issues (Hambly et al, 2009) and the degree to which the parents are involved in the treatment process (McKenna et al 2009); An aging population means that healthcare providers in Japan will be dealing ever more routinely with geriatric patients, and these patients may require a particular communication style. Fukuya et al (2004) in a study of caregiver-patient interaction in three metropolitan geriatric care facilities showed that during affective communication ('talking to facilitate psychosocial life activities') caregivers were more likely to elicit utterances from patients than during instrumental communication ('talking to elicit the activities of daily living (ADL)-related behaviour or physical functioning'). In a follow up study at the same three facilities (Fukuya et al 2009) the researchers conducted a training programme for caregivers to raise awareness of the importance of affective communication, and talk about how to apply it in their work. Results showed that after the intervention affective talk by the caregivers increased significantly in the first week, although it tailed off after 3 months.

(ii) The rise in the number of doctors.

Asano et al (2001) explain how despite the Japanese government's recognition, based on studies during the 1980s and 1990s, that there would be a surplus of physicians in Japan and their plans to reduce the numbers of medical students, this manpower policy was failing due to a lack of consolidation of the data on future physician demand. A surplus of doctors inevitably leads to more competition between private clinics. This in turn may increase the possibility that the consultation will have elements of a service encounter.

(iii) Type of hospital

Health care in Japan is a mix of private and public practice, and patients are free to choose any hospital they like. In either case, treatment is paid for through the national insurance scheme, which all Japanese citizens join, either through their employer or directly with the government. This covers all medical administration costs, 80% of inpatient treatment and 70% of outpatient treatment (IPSS 2002). Patients in Japan have much choice when deciding their medical care. In a large city such as Sapporo there are private hospitals and clinics, usually specialising in one area of medicine, and large public hospitals with a comprehensive range of equipment and facilities and a wider range specializations, giving them more capacity to deal with chronic or complex cases. Meanwhile, doctors at private clinics are often self-employed and under more financial pressure, which means they have to

market themselves to attract patients, and provide a service that is likely to keep patients coming in the future. This service aspect may therefore affect the power dynamic of the consultation.

Large hospitals have more facilities, but they have more bureaucracy and longer waiting times. An advantage of small local clinics is therefore the speed of service – the patient is likely to complete the consultation and administration process more quickly. In addition, once a local clinic has the trust of a patient or his/her family they are likely to become the first point of contact for medical problems, albeit within the scope of speciality they offer. Therefore, there is more likely to be an ongoing relationship between D and P, which is less likely at a large hospital, and this will have a bearing on the nature of the consultation.

(iv) Seeking a second opinion

When a patient has a presenting condition which could be associated with a serious illness, he/she may not be satisfied with an initial diagnosis and decide to seek a second opinion. Hu et al (2008) investigated the views of doctors and (parents of) patients when there is an uncertain health risk (cases of childhood food allergy). The parents did not expect absolute certainty from doctors, since this might not allow their own preferences to be acknowledged or accommodated, so when doctors were absolutely certain in their diagnosis the parents were more likely to seek a second opinion. This suggests that a more patient-centred approach increases the trust the patient has in the doctor, and makes the patient more willing to accept the diagnosis. In anther paper, Westra et al (2002) made a comparison of patients' initial diagnosis at a referring hospital and a second diagnosis at the referral hospital (Johns Hopkins). Of the 814 cases they reviewed, the second opinion diagnosis resulted in 54 (7%) changed diagnoses (8 from benign to a malignant, 33 from malignant to a benign, and 33 involved a change in tumor classification). The consultation with the second doctor is carried out against the fact that the patient has already questioned the competencey of the first doctor. The referral doctor has to respect the competencey of the first doctor, assert his own professional authority, address the patients' concerns, and in the event of a confirmation of bad news, prepare the patient to deal with the condition and make decisions about the possible treatment plans. The doctor must therefore steer a delicate path through the consultation, which will be reflected in the communication style.

(v) The laws regarding informed consent in Japan

The law of consent has been used to make comparisons in cultural attitudes between Japan and America (Akabayashi and Slingsby 2006) Tejima (2002) notes that informed consent has been seen as a useful tool to change the traditionally paternalistic doctor-patient

relationship, moving from "explanation and consent" to "informed consent and choice." However, Leflar (1996) is sceptical of of American style informed consent being accepted into Japanese medical practice:

> Calls for recasting the traditional paternalistic doctor-patient relationship have become sufficiently pervasive that the medical profession itself has accepted the need for incorporating something called *infomudo konsento* into medical practice. The medical establishment is engaged in a strategic undertaking to tame and "Japanize" the concept of informed consent in a way that will accommodate the preservation of professional autonomy and authority (ibid: 109).

He shows that Japanese courts have generally given 'a high degree of deference to medical professionals customs regarding information disclosure to patients'. In contrast, a study by Fukuda et al (2009) highlights the costs involved in the documentation of the informed consent procedure at 6 acute care public hospitals in Japan. They conclude that while informed consent ensures patient autonomy and self-determination, it has a heavy financial and time cost, requiring an increase in resources to deal with it. So, while society at large welcomes the principle of informed consent, there appears to be resistance to it from the medical profession.

2.5 Summary

This chapter has had two main parts, a discussion of doctor-patient discourse, and a discussion of Japanese culture. In the first two sections (§2.1 and §2.2) I reviewed previous research on doctor-patient communication, focusing on the institutional framework in which consultations take place. My aim has been to show how the roles of the two participants are bound by the institutional setting. I showed that consultations have predictable phases, which allow one of the participants more power to initiate topics than the other participant, but that this initiative shifts from phase to phase. This understanding of the roles of the participants during the series of consultation phases forms the basis of my analysis of the Japanese data I collected for this research, and I shall make frequent reference to it during subsequent chapters

In the third section of this chapter (§2.3) I reviewed research on Japanese culture and Japanese interpersonal discourse, including comparative studies of Japanese and English communication styles. I argued that national culture plays an integral role in interpersonal communication beyond the linguistic restraints of the language, and I have suggested that cultural differences might show up in clinical discourse. While 'culture' is often used in a vague or generalized way, attempts have been made to define it in such a way as observable and therefore measurable in some way, most notably by Hofstede (1997). Through my

discussion of two comparative studies of English and Japanese styles of casual conversation I have tried to show how Japanese cultural features impact on features of Japanese discourse such as silences and backchanneling. Finally, in section §2.4 in an attempt to break down the image of a homogeneous Japanese culture I considered other social factors that have an impact on individual Japanese medical consultations.

Having noted the institutional restraints on medical consultations and the affect of culture on communication style, I am thus in a position to explore Japanese medical consultations from two perspectives: as an institutional event and a cultural event. In the following chapter I explain the process through which I collected the Japanese consultation data, why I chose to collect that data and how I prepared the data to be analysed.

3. RESEARCH METHOD

3.1 Overview

This chapter explains the conditions under which the Japanese data were collected. There is an overview of previous studies of Japanese doctor-patient interactions, explaining how the present study relates to and builds upon their methodology (§ 3.2). §3.4 specifies in more detail the research goals of this study, then in sections §3.5-3.7 I explain the quantity and type of Japanese language data I collected, and the conditions in which it was collected, including a description of the participants and the setting. The last section of this chapter (§3.8) explains the approaches used to analyse the data, which involved a combination of quantitative (concordance) and qualitative (conversation analysis - CA) methods. I give a brief review of CA principles, arguing that external (contextual and ethnographic) information is necessary to interpret talk in interaction, thereby making a distinction between 'pure' and 'applied' CA. CA therefore informs my analytical approach and it uses some of the terminology that has emerged in that field, but it does not attempt to add to the list of established 'conversational actions'. Instead, I apply the CA framework to the medical setting in order to identify features of the doctor-patient discourse, which I interpret through reference to the institutional and (national) cultural context.

3.2 Previous studies of Japanese doctor-patient conversations

Mukohara et al (2004) investigated the effectiveness of an intensive communication skills training programme for Japanese medical students in Gifu, Japan. They video-recorded student interactions of 97 students with a 'standardised patient' – 50 had participated in the communication skills course; 47 had not. All the students' interactions were subsequently rated for communication effectiveness by two independent observers. Their results showed that between the two sets of students there was a trend for improvement in the skills needed for asking the patient's ideas about the illness or problems, and a smaller trend for improvement in relationship-building skills (being attentive and empathetic nonverbally). They concluded that this kind of short, intensive small group seminar may have had a short-term impact on specific communication skills with patients (Mukohara et al 2004).

Ueda and Hasegawa (1999) carried out a study of directives used by Japanese doctors to patients in 246 audio recordings of consultations at two general hospitals (Osaka and Nagoya) and at two small clinics (Osaka and Tokyo) (Ueda and Hasegawa 1999; Ueda 2000).

They showed how the directness of an utterance was affected by both the psychological distance between the participants and the urgency of the directive. I discuss this further in Chapter 7. This study is relevant to my own research because it directly compares Japanese and (American) English communication styles. Ueda and Hasegawa's (1999) study used speech act theory to analyze the doctor's language strategies according to illocutionary acts of command (imperatives). They examined how the doctor used mitigating strategies and persuasion strategies to avoid FTAs. The command strategies were influenced by two factors: the degree of urgency, and the psychological distance between doctor and patient. They note how the strategies showed asymmetry – they were within the prerogative of the doctor, not the patient and depended on maintaining harmony.

Finally, Ohtaki et al (2003) made a quantitative study of linguistic and communicative differences between Japanese and American consultations, recording 20 outpatient encounters in small rural communities in each of the countries. They found 'compelling evidence' showing differences in each country regarding the proportion of time spent in each phase of the encounter, in the length of pauses and the use of backchannel responses and interruptions, but similarities in the ratios of questions and other speech acts. They concluded that 'the variations may reflect cultural differences, whereas the similarities may reflect professional specificity stemming from the shared needs to fill the information gap between physician and patient' but, in order to determine the robustness of their own findings, they call for more research 'to examine potentially influential variables such as gender, age, race, medical or surgical specialty, institutional affiliation, organizational setting and rural versus suburban setting' (Ohtaki et al 2003: 281).

The present study follows on from Ohtaki et al in that it further examines the interplay between the expectations of the institutional setting and the verbal interaction between the participants, in order to examine patient-centredness. The institutional norms of medical consultations are well established (§2.2), and particular discourse features appear in specific phases of the consultation. In addition, patient-centeredness is achieved through the verbal and non-verbal behaviour of the participants, led by the doctor. However, are the institutional norms of interaction universal? If not, how could the influence of localised culture on the discourse be detected? Since much of our knowledge of discourse in medical consultations is derived from studies carried out in English language settings, there is a possibility that English norms become the default, and important cultural influences on the discourse are missed, thereby leading to a less subtle understanding of the interaction. Maynard and Barnlund, among others (§2.3), have shown differences in English and Japanese mundane talk that are likely to have been caused by the respective cultures of the participants.

How would these differences manifest themselves in a more rule-governed institutional setting? Would local cultural norms of interpersonal communication affect the institutional norms? A detailed empirical study of discourse during the different phases of Japanese consultations has yet to be made, and in order to address this gap in our knowledge, I decided it was necessary to collect authentic Japanese conversation data from real medical consultations and analyse the interactions in a detailed and systematic way.

In a recorded conversation, the participants interact in a natural way, which makes it a valuable source of first hand linguistic data from which strong conclusions could be drawn. Attitudes to patient-centredness could be garnered by interviewing doctors and patients or surveying them through questionnaires, which could even include imaginary scenarios requiring the respondent to write an utterance that could be assessed for its pragmatic aspects (Holst 1996). However, attitudes about language use revealed in questionnaires and interviews are necessarily one step removed from actual language in use, since the respondent is being asked to imagine what he/she would say in a given situation, rather than actually bing in that situation in real life. An alternative method might have been to have asked medical students or doctors to have consultations with actor patients who play out a role (as explained in the HUH medical communication course in the §3.6.1), as this would have avoided the need for consent, and the same 'patient' could have consultations with different doctors to achieve a standardisation of data. However, in such a situation both participants know the situation is artificial, and this would raise serious questions about the authenticity of the data.

Therefore, the motivation behind my method of data collection was authenticity. I recorded a series of real Japanese medical consultations that took place in the outpatient department of a large university hospital on four ordinary mornings during September 2001. The patients gave their consent to participate in this research just before they went in to see the doctor, and both parties were focused on the business in hand – finding out the patient's illness and deciding on a course of treatment to help him/her. Their complete interactions were recorded on an intrusive recorder placed on the desk. After the consultation the recordings were handed over to me for analysis of discourse features that would reveal information about patient-centredness.

3.3 The key concepts: patient-centredness, power and asymmetry

3.3.1 Patient-Centredness

In a consultation the ends of the doctor are not always the same as the ends of the patient. Drew and Heritage consider 'the difference, and often tension, in the organizational perspective [of the doctor] that treats the individual [the patient] as a "routine case", and the

client, for whom his/her case is unique and personal' (Drew and Heritage 1992:51). The doctor seeks to assign the patient to routine categories that the patient is often unaware of and may not care about, even if he or she was aware of them. This is the dichotomy between the 'voice of medicine' and the 'voice of the life world' (Larsen et al 1997:300)

For example, a patient comes in with an ailment that he or she vaguely understands and his/her aim is to get medicine or some other treatment that will either cure the illness or provide relief from the symptoms to allow him or her to get on with his/her life. Meanwhile, the doctor wants to deduce, through tests, physical examination and questioning the most likely cause of the illness then make a decision about treatment. If there is a suggestion of a disease that has a genetic basis, the doctor might want to explore the patient's family medical history in detail in order to eliminate it. However, the doctor's detailed questioning in this area might seem like an unnecessary diversion to the patient, who is focusing on his own interpretation of what is wrong with him. Accordingly, a certain piece of information or a question that is important to the speaker may not be as important for the listener so it is more difficult for the speaker to make the listener focus on it. At such times, the doctor may cut off the patient and change direction, but in the reverse situation the norms of interaction make it difficult for the patient to express his/her concerns, especially during the more doctor-centred phases. The more doctor-centred the conversation is, the easier it is for the doctor to set the agenda, and without the cooperation of the doctor it is more difficult for the patient to set the agenda (e.g. consultation 4 in §1.1).

Mishler briefly mentions doctor- versus patient-centeredness, as part of his discussion of Byrne and Long's (1976) system of coding doctors' question types, which he criticises for not having a defined coding procedure (Mishler 1984: 41-4). Enelow et al (1996) contrast patient-centred and doctor-centred medical interviews, defining the latter as an 'interview in which the patient's history is elicited by asking a series of questions [that may have] a bias that can result when the physician poses questions that limit the patient's freedom to respond. … questions asked are more biomedical in nature as the physician constructs a clinical history from the patient's symptoms' (p6). This type of interview 'emphasizes data collection and aims for high efficiency in gathering detailed data within limited time periods' (p40).

A patient-centred consultation is one in which a doctor negates or mitigates the power asymmetry in the institutional context by using his professional status to enable the patient to have more influence on the course of the interaction. Enelow et al (1996) explain patient-centredness through their summary of open-ended interviews:

> The open-ended interview emphasizes attention to rapport and to the development of the clinician-patient relationship. It aims to facilitate the emergence of facts rather than their extraction from the patient, thereby creating

> the opportunity for less biased and more relevant information, both verbal and non-verbal. It relies on a differential use of the clinician's authority, never using more authority than is required to get the needed data, and on the ability of the interviewer, through appropriate support and reassurance, to express his/her interest in helping the patient (Enelow et al 1996: 40).

Being patient-centred thus involves adopting the mutual participation model through the use of summarizing (listening & eliciting) skills and 'therapeutic silence' where the doctor allows the patient time to collect his/her thoughts (Neighbour 1999). As noted in §2.1.1, the mutual participation model has become the methodology of choice in the teaching of communication skills to medical students in both the UK and in Japan. Larsen et al (1997) argue that the patient-centred interview is the most efficient means of problem formulation and solution for the doctor who has a limited amount of time. In Japan, the teaching of communication skills to medical practitioners is growing, but 'in many traditional medical schools in Japan, communication skills teaching is limited in time and scope, and isolated from other formal curricula.' (Mukohara et al 2004).

The degree to which a consultation is patient-centred or not is influenced not by the patient but by the doctor. This is due to the asymmetry of power that exists between the two participants.

3.3.2 Power

Patient-centredness is enabled by the doctor because he/she has the power to manage the consultation. In other words, the patient is given his/her voice though the authority of the doctor, by virtue of the institutional asymmetry that exists between them. Power in the D-P consultation means having more turn-taking rights and more ability to initiate topics. D has this power during most of the consultation, but power changes during the different phases (D has the initiative at the start; then the initiative passes to P as he/she describes his/her complaint; the initiative is retaken by D in the history-taking phase and kept until the end of the consultation). D's status is reconfirmed in every new encounter. D may choose to use this power in a doctor-centred way (the voice of medicine), or she/he may use it to engineer a more patient-centred consultation to bring about a clinical outcome that satisfies the patient. D's power is based on five factors (§2.2.4):

1) **keeper of knowledge** – the doctor has power in his/her institutional role.
2) **gatekeeper** – the doctor has the power to prescribe medicine/treatment.
3) **timekeeper** – the doctor has the power to decide when to move the consultation on.
4) **host** – the doctor has the power of being on home ground
5) **expert on the institutional setting** – the doctor knows the consultation structure.

It should also be understood that there is no direct connection between patient-

centred communication and patient empowerment. Rohrer et al's (2007) study of patient satifaction in primary care clinics in the USA found that while patient-centered communication by the doctor (explanations, listening, use of understandable words and involving the patient in the decision making process) is positively associated with patient empowerment, it was not as strong as the patient's feeling that he/she was in control of his own health. Therefore, higher patient satisfaction does not necessarily mean higher patient empowerment.

3.3.3 Asymmetry

While the power to move the conversation on may shift within different phases, the underlying relationship between D and P is one of asymmetry, with D having more abstract power than P. Even when D appears to be incorporating the patient's perspective, in fact D always has more abstract power than P and he/she always asserts the voice of medicine, which may contradict the position elicited from the patient. This asymmetry is inevitable, and beyond the control of the individual doctor or patient. According to Maynard (1991) there are three types of asymmetry:

1) **professional authority** – the doctor has the gate-keeping monopoly over treatment, so the patient complies with the doctor's advice whether he/she agrees with it or not.
2) **socio-political structures** – doctors can not avoid asymmetry because are either agents of social control, or they are as subject as the patients to the 'discursive formations' that operate on all individuals who speak within a given field.
3) **communicational structures** – the patient's "voice" is stifled and silenced as the clinician asserts and reasserts the dominance and singularity of the clinical perspective.

3.4 Research Questions

As stated in §1.2 the goal of this study is to consider how Japanese doctors achieve patient- centeredness through verbal interaction with their patients through their respective institutional roles. How do the discourse features during the different phases of the encounter relate to changes in footing at those points, and how do the participants co-construct their conversations to make them more patient-centred? I propose that the discourse is shaped and restricted by both the institutional setting (the hospital) and the social setting (the Japanese speech community at large) in which the participants find themselves.

Here, I explain my goals more specifically to indicate the rationale behind my method of data collection, to explain my motivations in deciding my analytical approach and to make clear exactly what I hoped to discover through this analysis. Through an empirical study of recordings of authentic Japanese medical consultations the aims of this thesis are to:

(i) determine the discourse framework within which these Japanese consultations are carried out (the phases of the consultation)

(ii) compare the styles of newly qualified, trainee doctors with those of experienced senior doctors: how does experience affect doctors' discourse strategies and creating patient-centeredness?

(iii) discover how Japanese patients and doctors work together to achieve a patient-centred style in which to identify and address the patient's ailment;

(iv) identify and explore the asymmetry of power in Japanese medical consultations: how do cultural and institutional influence the way they construct their roles as doctor and patient, and how do Japanese medical consultations compare with English medical consultations?

To facilitate these objectives, I audio-recorded 72 doctor-patient encounters in the same Japanese hospital department of thirteen doctors and their patients on separate four days. There were two kinds of doctors: seven were newly qualified interns or junior doctors (JDs) who carried out initial consultations with the patients; six were experienced or senior doctors (SDs) who carried out a second consultation, ordering tests establishing a diagnosis and/or making a treatment plan. After recording and transcribing the data I analyzed a number of aspects of the conversations that would enable me to answer the research questions above.

The data was analysed to determine (i) how patient-centredness is established and maintained in the consultations, and (ii) to detect any aspects of the interactions that might be considered culturally (Japanese) specific. The type of data, being audio only, limited the kind of analysis I could carry out. Although video data would have enabled a much richer analysis, including an examination of non-verbal behaviour[18], my primary task was to make a detailed examination of verbal interactions, using the recordings and their transcriptions. Here are the five aspects of the consultations I analysed:

1) How the participants mark the end of a topic or a phase of the conversation and the start of a new topic/phase; and how the participants (especially the doctor) mark the end of the phases within the consultation. In particular, I analyzed the function of any specific verbal expressions that occur at these junctures (e.g. 'wakarimashita' (= *I understand, I see*), 'ja' (= *So, well*)). These topic markers determined the boundaries between phases of the consultation, allowing me to establish the discourse framework (research question (i)). The utterer of the topic shift marker and the type of topic shift marker indicates who has power at this point of the consultation. This analysis is reported in Chapter 4.

[18] For example, Ishikawa et al (2006) conducted a video recorded study of medical students consultations with standardised patients showing how specific NVB – nodding, eye-contact, speed and volume of delivery – may have an impact on the perception of the pateint's visit.

2) The characteristics of each phase of the consultations, especially the openings and closings. The way the conversation opens is very important to setting the tone of the interaction, and establishing the power relationship. Closings are important as they are the last chance for the patient to ask questions or express any concerns. Instances of patient questions might indicate that the doctor has established a more patient-centred style (research question (ii)). This analysis is reported in Chapter 4.
3) The doctors' questions: qualitatively – establishing five question types that were used; quantitatively – comparing the number of questions that were used by the two kinds of doctors (JDs and SDs) (research question (ii)). The type of doctors' questions was expected to indicate the degree of patient-centredness; the more directive the questions, the less patient-centred (research question (iii)). The respective proportions of doctors' and patients' questions was also expected to indicate the degree of patient-centredness: more patient questions might suggest more patient-centredness. This analysis is reported in Chapter 5.
4) Backchannelling by patients and doctors during extended talk (narratives). Extended sequences of talk were expected by the patient when presenting their illness, and to some extent during the history-taking. The extent and kind of doctor's backchanneling during these narratives was expected to indicate the degree of patient-centredness (research questions (iii) and (iv)). Conversely, extended talk was expected by doctors during the diagnostic and treatment phases. A high level of patient backchanneling would indicate active participation, and therefore patient-centredness. Also, a high number of patient questions during these phases would indicate the doctor is opening the floor, and thereby mitigating his/her power. This analysis is reported in Chapter 6.
5) How the participants exhibit sensitivity to each other's status, needs and expectations through their use of verbal and prosodic features, such as laughter, in order to facilitate the smooth transfer of information. In order to investigate cultural differences I also compare the patterns of laughter in my data with English consultation data (research question (iv)). This analysis is reported in Chapter 7.

3.5 Data Targets

Quantity

'Pure' CA involves a detailed qualitative study of discourse at a micro level that would require the collection of a number of consultations to establish conversational patterns. As discussed in §3.7 below, CA looks for the regular patterns that occur in talk-in-interaction, such as backchannelling or topic shift markers, so it was necessary to collect enough

conversations that would involve different doctors and patients, but recorded in the same institutional setting in order to determine whether any regular conversational patterns emerged. When considering how many consultations would be necessary for my research task I considered a number of factors, which I now discuss.

In some discourse studies detailed analysis is carried out on one complete text, in an attempt to find out "all the interesting features of this limited domain" (Levinson 1983: 286). For example, Labov & Fanshel (see §2.1.2) state of their 360-page study of one medical interaction:

> … we have been able to draw from these five episodes enough repetitions of the same phenomena to confirm our sense of the validity of the rules and analyses presented. […] our main focus is upon this interview as an example of human conversation in general, and we explicate the specific features so that the application of the general principles can be seen (Labov and Fanshel 1977:7-8).

For the present research I decided to compile a corpus of complete conversations that was large enough to identify the conversation patterns used by the participants in this setting. I decided I should collect 50 conversations since (i) this was a feasible target to reach, as I was not confident that many patients would agree to give their consent to being recorded; (ii) it was within the range of previous studies discussed by Stewart (ranging from 45 subjects to 652 subjects) (Stewart 1995); (iii) I considered that a corpus of this size would be big enough to discover regular conversational features of Japanese doctor-patient consultations according to the criteria discussed by McEnery and Wilson:

> In a pilot study Biber found that frequent items are stable in their distributions and hence small samples are adequate for these. Rarer features on the other hand show more variation in their distributions and consequently require larger samples if they are to be fully represented in the corpus (McEnery and Wilson 2001: 80).

Type of Data

All conversations, no matter how similar, are unique. No matter why or how they start out, they will develop in ways that are not completely predictable from the outset. The participants co-construct their course as they navigate unexpected events that unfold before them. However, clearly the more constrained the participants are by the setting, and the less casual or mundane the conversation is, the more predictable it is going to be. Everyone knows why they are there, even before they begin their encounter. They can predict the kind of mood that will prevail, they know what their physical position will be in relation to each other, the likely length of the encounter and they know what role they are expected to play in the events. More specifically, they know what kind of language is going to be used – the

kinds of questions, the degree to which they are expected to elucidate their answers, the kind of vocabulary that will be used and so on. The format and discourse of medical consultations are therefore much more predictable than free-ranging chats among friends. Even so, within this medical discourse framework, there are still many sources of variability – the location, the purpose of the consultation, the presenting condition, the psychological distance between the participants, and so on. In order to eliminate as many of the situational variables as possible, and to see the same patterns over and over again I decided on the following criteria:

- To ensure consistency in the data, all the consultations should be recorded in the same place (the same hospital department, the same room layout)
- They should all be first time consultations rather than ongoing cases, so the participants would not have met each other before. This means that there is likely to be an introductions phase in the opening part of the consultation, and there always be a series of diagnostic phases (phases I-IV in Byrne and Long's model, §2.2.3) from where the patient presents his/her health problem, to the point where a diagnosis may be made.
- As far as possible the recordings should include the same stages of the consultation (greetings, presentation of the illness, history-taking, tests, discussion of test results, diagnosis, prognosis, treatment plan, ending).
- The recordings should all take place within a short period of time to help eliminate any changes in the medical staff or in departmental procedure, in order to keep the setting for all the consultations as uniform as possible.

In the process of seeking cooperation from doctors for my research I met Professor Masaharu Nishimura at the First Department of Internal Medicine at Hokkaido University Hospital, who agreed to support me and allow me to carry out the recordings in his outpatient department. His department had a staff of thirteen doctors. He also agreed to guide and sponsor me through the necessary ethical and legal procedures and committees that the hospital required. This would enable me to fulfill all my research criteria since:

- the department was specialized in one area – respiratory disorders – thereby narrowing down the potential scope of the consultations;
- all the consulting rooms were the same size and had the same layout;
- all the patients went through the same administration, consultation and diagnostic procedures;
- there were specific days and times of the week when the department dealt exclusively with new outpatient cases;
- the hierarchical structure of the department meant that I could make sure all the doctors

were on board, and they would follow the same recording procedure that would be discussed in the weekly departmental meeting.

Ethics Committee

In order to get permission to carry out the recordings I made a formal proposal to the ethics committee at Hokkaido University Hospital. The committee meets regularly to consider any research proposals at the hospital that involve patients, such as new forms of treatment or procedures, or any other activity that might infringe on the rights of the patients. The ethics committee requires that the procedure should be legal, the patients should be told exactly what the procedure involved, what the possible outcomes would be, and how the data would be used; they would have to show they had understood this explanation and freely give permission for the procedure by signing a written consent form (Appendix 5). In my proposal I was required to explain the aim of the research, specify the subjects who would be involved and describe the method. In July 2001, after considering my proposal, the committee approved the plan on the condition that all personal names and other information that might identify the patients was erased from the recordings before they were handed to me for transcription. A recording technician at Hokkaido University was nominated and approved of to carry out this task.

3.6 Obtaining the Data

3.6.1 The psychological setting

In this section I examine aspects of the Japanese health care system that are relevant to my study, by explaining the psychological setting, or 'scene' (Hymes 1972: 60) in which I collected the Japanese data. This has two aspects: first the system of training doctors in Japan, and second the structure of the healthcare system – the processes that patients go through and the decisions they have to make to find their doctor. On the first point, since all the doctors in my study have been trained in the Japanese system, their consultation style will have been influenced by their experiences in it, even though the development of new training techniques is ongoing. On the second point, there are differences in the healthcare systems between Japan and the UK that have a bearing on the type of doctor that patients see, especially in the primary care stage. For example, in one comparative study of consultations between Japan and the USA Ohtaki et al found there was a difference in the average length of consultations which could be accounted for by differences in the medical and health insurance systems (Japan = 668.7 secs; US = 505 secs):

> While Japanese patients typically are expected to visit their physicians at the first sign of acute illness and every 2-4 weeks for chronic medical problems, patients in the USA, particularly those perceived to have a self-limited illness,

> are encouraged to self-treat and to schedule with a doctor only if not improved, and every 1-6 months for chronic problems. Given these circumstances, individual visits in the USA would probably require more time for adequate communication (Ohtaki et al 2003).

Doctors study at medical school for six years, pursuing courses in basic medical science and being trained in basic clinical practice. After graduating they are eligible to take the national medical certification examination (*ishi kokka shaken*), which licenses them to practice medicine in Japan. Following this, they must do a two-year general internship, before they can embark on a career in their chosen medical specialty. Japan has no international agreements regarding medical training, so only doctors trained in the Japanese system are licensed to practice in Japan (WHO, 2003). After passing their medical certification examination, the new doctors must find a place at an accredited teaching hospital, where they spend two years on general rotation as an intern. University hospitals are research oriented, whereas public (city) hospitals and private hospitals are more concerned with primary care. After their two-year internship, the new doctors are free to pursue training in their chosen specialized field. A major difference between the UK and Japan is that very few doctors choose to specialize in general (family) practice (for example, in HUSM in 2003, only one new doctor out of a hundred joined the general practice department). This means that in society at large, it is very difficult to find a general practitioner, so people with medical ailments have to make their own judgment about which specialist to see about their problem. Since the doctor they see can only give diagnosis and advice in his/her own field, if all the tests show up no abnormalities in that field he/she may not be able or willing to suggest which other specialist the patient ought to see next.

After graduating and passing their national medical license examination, new doctors gain further experience of consultation techniques in each of the departments they work in during the two years of their 'super rotation'. In the first department of internal medicine, new interns observe real consultations with experienced doctors, and then carry out consultations themselves under the observation of their peers and of senior doctors who discuss their performance with them. As an aid to the history-taking process, new interns are given a summarized checklist of topics to cover (Appendix 2 is my English translation of this guide). After this, they carry out consultations (history-taking) with patients by themselves, and the interns I recorded during my research were at precisely this stage of their training, having been in the department for five months.

The system of training changed in 2004, on the basis of a series of recommendations made by a committee set up by the Ministry of Health, Labour and Welfare to investigate and improve clinical training in Japan. The final report, published in June 2003, covers all aspects

of the training of new doctors. Regarding communicating with patients the paper lays out the following specific training objectives:

> Communication skills should be learned, to ensure that the patient understands the meaning of the communications given in the medical interview, and a model of the patient's interpretation of the aim of the consultation and treatment plan should be grasped (MHLW 2003). (my translation)

Consultation skills training at Hokkaido University School of Medicine

I was able to observe and record on video similar training techniques at HUSM with final year medical students under the supervision of the professor of primary care. The session I observed involved six students, who had been taught theoretical and practical aspects of the consultation format and communication techniques during one week. Then, one by one, they had to put this training into practice by performing a role-play of a consultation with a mock patient who had a medical problem they had to diagnose in front of their peers and the professor. The 'patients' were played by volunteer actors from the local community who had spent many hours preparing and discussing their characters together. At the end of the role play the students received feedback from all the observers, and from the 'patient', who explained how he/she felt about the doctor's manner and communication style. After this, the student gave his/her own opinion of his/her performance, and finally, the professor gave a summary of the points that had come out of the training session. The sessions are the culmination of classes and training sessions in consultation technique that begin in the students' fourth year, and all students at HUSM have to go through this programme, which started with the arrival of this professor at the school in 1995.

How patients choose their doctor

Recent concern among primary care doctors in Japan about the growing numbers of patients who frequently change physicians without letters of referral, prompted Guo et al to investigate patient satisfaction of medical treatment, in order to determine why the of self-referral rate is so high (Guo et al 2002). Their survey of patients in a general medicine clinic showed that among self-referred patients there was a higher dissatisfaction with their previous hospital visit than among patients referred by another doctor. The main cause of dissatisfaction was the medical staff, rather than the environment, waiting time or medical equipment. They conclude that "open doctor-doctor and patient-doctor communication is necessary to increase patient satisfaction" (Guo et al 2002: 331).

3.6.2 The physical setting

All the conversations in my study were recorded in the outpatient section of the first department of internal medicine of Hokkaido University Hospital (HUH), which specialises in the treatment of patients suffering mainly from problems of the respiratory tract, but also

problems of the digestive tract, diseases of the metabolism and diseases of internal secretion. Doctors from this department see patients with new cases on Monday mornings and Thursday mornings (9.00a.m. to 1.00p.m.). On arrival at the hospital outpatients complete a general form describing their problem, then they are directed to the relevant department. The internal medicine department has its own waiting area and counter staffed by a nurse. Patients have their first consultation (history-taking) with a junior doctor in a small cubicle where doctor and patient sit face to face over a table. The patient enters through a door, which blocks out noise from the reception area, but behind the doctor there is a curtain, through which it is possible to hear the comings and goings of nurses, patients and other doctors. After this consultation is over, they either have tests in another section of the hospital or go back to the waiting area until their follow up consultation with a senior doctor. This takes place in a larger, enclosed consulting room, which nobody may enter without the doctor's permission. (Appendix 3 shows a sketch of the layout of the department)

3.6.3 Participants

Doctors

The doctors in my study are categorized into two distinct groups according to their age and experience and to the kind of consultation they carry out with the patient. For convenience, I shall call these 'junior doctors' (JDs) and 'senior doctors' (SDs). The JDs were new interns from HUSM in their mid– to late-twenties, who had passed their national medical examination the previous April. Their role was to take the patients' initial history and to ask for medical tests they felt needed to be made. The SDs were in their late thirties or early forties. Their role was to follow up the initial history-taking phase by the junior doctors by further questioning the patient, discussing the test results, carrying out physical examinations, and making diagnoses and treatment plans. They would also see the patients who were returning to the department (for treatment or diagnosis) after a previous visit.

My original research plan was to record complete consultations between new patients and one doctor (i.e. all the diagnosis and treatment phases would be completed in one session by one doctor), not to have two sets of doctors with different roles in the treatment process. However, since the setting was a teaching hospital, and the two-part interview was a way for the new interns to get experience in history-taking, I ended up with two sets of data: (i) initial interviews with the young doctors and (ii) follow up consultations with the older, more experienced doctors (I discuss these differences in more detail in Chapter 4, in my discussion of the phases of the consultation). In fact, even though the clinical functions of the two sets of consultations are clearly demarcated, there are a number of phases that are integral to both, viz introductions and closings, questioning of the patient to clarify information, and the

explanation of medical and non-medical procedures and results. The main difference is that consultations involving senior doctors may include any or all of the consultation phases, whereas the junior doctor consultations never include a physical examination, a diagnosis, or a discussion of treatment in their encounters.

Moreover, having two sets of data, while adding to the complexity of the analysis, had its own advantages. First, I had two distinct groups of doctors who were dealing with the same patients, which would enable me to make a direct comparison between two different doctors by eliminating patient variability. Second, it would give me the opportunity to compare all the newly qualified doctors as a whole with experienced doctors (through quantitative analysis), to see if greater experience in such aspects as managing the pace of the consultation or directing the topic, showed up in the discourse styles of the two groups. Overall, having these two sets of data opened up more possibilities for analysis than it closed.

Patients

The patients were suffering from a variety of complaints; they were either doctor-referred from smaller practices, or self-referred - coming directly to the department as first time patients. Since there were only two mornings a week when I could record, initially, I was not certain about reaching my target of 50 conversations by the end of September. To prepare for such an eventuality I arranged to extend the research to include patients who were having follow up treatment, if it proved necessary. However, such data would have had to be treated as a separate set from the rest, as the doctors and patients in the consultations would have already met each other: my goal was to have data of first time encounters. In the event this precaution proved to be unnecessary as I reached my target within the four days.

It was important to obtain recordings of new cases in order to help standardise the data. Thus, in every consultation the participants start out as strangers: there is no ongoing relationship between them, instead they have to create a relationship during their next few minutes together. Also, for completeness, and to have the greatest opportunity to be able to investigate how patient-centredness revealed itself through the doctor's utterances, I wanted data from all the stages of a 'standard' consultation (see §4.3): Introductions (the participants had not met before so how would they greet each other? Would there be any small talk? How would the doctor initiate the conversation, or would there be any cases where the patient initiated the interview – if so how?); History taking (how would the doctor elicit information from the patient? How would the doctor cut off the patient (if at all)? How would the doctor guide the patient towards giving him/her the information he/she needed most? To what extent would the diagnostic process dictate the exchanges?); Explaining information (How would the doctor explain to the patient about the illness or the treatment plan (medication, medical

procedures or lifestyle changes)? How would the doctor give instructions about the tests he/she would need and directions about where to have the tests?; Terminating the conversation (Who would initiate the ending rituals and what would these rituals involve?).

3.6.4 Materials & Equipment

I used six *Toshiba Voicebar 420W* digital voice recorders with small (2cmx2cmx1cm) external microphones.[19] Each recorder stores up to four hours and twenty-three minutes of data, which was enough to include the entire morning's consultation period (9.00 a.m. to 1.00p.m.) if this were necessary. One button starts and stops the recording process, and a new 'track' is created automatically each time the recorder is stopped. Therefore, if a doctor made non-stop recordings of three complete consultations there would be three tracks on the recorder at the end of that morning's session. All recorders were labelled with a number and a letter (A or B) to indicate whether they were recording the consultations of a junior or a senior doctor.

The recorders were small and unobtrusive, which lessened their impact on the naturalness of the conversations. They were very simple to operate (there was only one button to press to record), which lessened the likelihood of any problems for the doctors operating them. The data could be downloaded directly onto a PC, using the software provided, allowing much more flexibility in analysis and transcription than would be possible with cassette tapes or mini-discs. The fact that the data was digital from the outset meant that the originals could be edited or copied without losing sound quality. The recorders automatically labelled the date, time and number of each track.

Audio versus video recording

It has been estimated that in a two-person conversation at least 65% of the social meaning is carried by non-verbal components such as eye contact, gaze, facial expression and posture (Harrison 1974). Physical proximity and the relative positions of doctor and patient in the consulting room also influence interaction, for example the absence or presences of a table between patient and doctor affects patients' composure and therefore their inclination to communicate (Morgan 2003: 62). Therefore, video recordings would have revealed much more information about the consultations than audio recordings. However, I decided to make audio rather video recordings because I was less confident about: a) getting permission from the ethics committee; b) getting the cooperation of the doctors; and c) getting the consent of the patients. I made this judgment independently, and I at no stage did I ask permission to use video either to the professor in charge of the department, or the hospital ethics committee. My decision was influenced to a large extent by the response I had had from my initial enquiries

[19] These recorders were purchased with a research grant from Otaru University of Commerce.

to doctors at local clinics, who were very negative about having their consultations recorded at all. Once I had made contact with the professor in charge of this department I had already decided only to ask to make audio recordings, calculating that I would be less likely to obtain permission to carry out video recording as it might be deemed too invasive of the participants' privacy.

On the other hand, audio has its own advantages. A small audio recorder is much less intrusive than a video camera, less likely to affect the naturalness of the conversation, and less likely to be turned off during an intimate physical examination. Also, because the small voice bars require only minimal bother for the doctors, it was easy to explain the procedure to them, so they could get on with their job without any obvious paraphernalia to disturb them. Finally, in this project my attention was primarily on the verbal exchanges rather than the accompanying non-verbal behaviour, and a voice recorder with a good microphone would be capable of picking up the voices of the participants wherever they moved. Conversely, a fixed video camera has a limited visual field, so the participants may sometimes be out of shot anyway.

3.6.5 Procedure

Preparing the doctors

All the doctors were briefed about this project by the head of the department at the weekly departmental meeting preceding the first day of recording. I was not present at this meeting. He explained my research aims and the contents of consent forms (Appendix 5) the patients would be given. As the doctors would be in control of the recorder for the duration of the consultation, they were also instructed about the recording process: whether or not the patients had given their consent to have their consultations recorded; how to operate the recording devices; and at what point of the consultation they should start the recording devices. I aimed to capture the complete consultation, including the initial greetings between patient and doctor. It was important to hear how the doctors greeted the patients and settled them down at the start of the consultation, so there should be minimal or no mention of the recording process. We therefore worked out a system of indicating on the patient's card whether or not that patient had given consent or not, so the doctor could have the recorder on before the patient entered the room. The doctors were told that they could turn off the recorder at any time during the consultation, either if the patient requested it, or at their own discretion, but wherever possible the recorder should be left running continuously until the consultation was over (i.e. after the patient had left the room).

On the days of the recording, the doctors would find the voice recorders on the tables in their consulting rooms, together with a summary of the above instructions to remind them

about the procedure, a copy of the consent form and a simple form to fill in about each patient: their gender and age, and, if the patient was accompanied by a third party, the gender of that third party and how he/she was connected to the patient. The form also had the doctor's name, the consulting room number and the number of the recorder (Appendix 4).

During the period I carried out the recordings, the procedure for patients visiting the first department of internal medicine was as follows:

1. All new outpatients come into the hospital, fill out a form describing their problem, which they hand in to the main outpatient reception desk.
2. The clerks in the main reception assess the patients' forms and assign the patients to one of the specialist departments. Patients who have been assigned to the internal medicine department present themselves at the smaller reception desk there and hand in their details to the nurse on duty, and they may also be asked for some more specific details. They then take a seat and wait for their turn to see a doctor.
3. An intern assesses all the patients' details and assigns the patient to a particular doctor belonging to the 1st, 2nd, or 3rd departments of internal medicine (IM1 = mainly pulmonary complaints, but some gastro-intestinal cases; IM2 = auto-immune system & metabolism; IM3 = gastro-intestinal).
4. After the first consultation with the junior doctor the patient either goes back to the waiting room to await the follow up consultation with a senior doctor, or he/she goes to another section of the hospital to have follow up test(s) (blood test, breathing tests, X-rays, etc.) and then comes back to the waiting room.
5. The patient sees a senior doctor, who has been passed the patient's card with the mark indicating that consent has been given. He/she assesses the information from the initial consultation and the results of any tests he/she has received and he/she may carry out a physical examination. The doctor may make a diagnosis and treatment plan for the patient including follow up visits, or he/she may arrange with the patient for a future appointment for further tests and/or to discuss the results of tests that are not available this day.
6. After the consultation is over, the patient leaves IM1 and goes to the main outpatients section to pick up his/her medicine and pay for today's treatment.

An assistant (a medical student in white coat and name badge) approached those patients who had been assigned to IM1, handing the patient an informed consent form, explaining the aims of the research and the contents and purpose of the consent form, stressing that the patient was under no obligation to agree to having their consultation recorded. After the explanation the student left the patient to read through the consent form

for a few minutes and allow him/her to decide whether to sign it or not. If the patient signed the consent form the student took the form to the intern responsible for assigning patients to doctors. The intern marked that patient's card to indicate that consent had been given, and the card was given to the consulting physician (JD). In this way, the physician knew that he or she could turn on the recorder before the patient entered the history-taking cubicle (Appendix 3) and therefore he/she would not need to refer to the research during the consultation itself.

The strategy decided upon for getting consent was the least disruptive for the medical staff and for the patient. For the sake of keeping the consultations as natural as possible, I did not want the doctor and patient to discuss the recordings during the interview; I wanted to hear the complete encounter, including the introductions. From the doctors' point of view, I decided it would be both time-consuming and possibly irritating for them to have to explain the consent form during the consultation, so they might have been less willing to participate in this research. In addition, research ethics demand that the subjects were informed before they were recorded, not afterwards (British Association For Applied Linguistics; American Anthropological Society 1986; Linguistics Society of America 1992).

After each doctor had finished his/her morning surgery, the recorders and corresponding patient record sheets were collected by a nurse and left for me to pick up. The recorders were taken to the sound engineer who downloaded them. Each track was matched and labelled with the corresponding information about each patient and doctor from the patient records (Appendix 4). In accordance with the instructions of the ethics committee, all personal names and other identifying information were edited out from the conversations. The basic information about each of the 72 consultations was put into a spreadsheet (Appendix 7).

3.6.6 Orthography and transcriptions

Accurate transcription of recorded data is a crucial stage of the research process. Ochs was an early exponent of the importance of the transcription process in empirical studies of verbal behaviour, and her 1979 paper on transcription as theory (Ochs 1979) focused on the lack of attention paid to transcription by developmental psycholinguists, when the transcriptions are the actual data these researchers are looking at. She notes the lack of any standardized notational scheme, and presents her own set of symbols, methodically going through the transcription of her own recorded data explaining how to layout the page and giving detailed descriptions of how to mark significant verbal and non-verbal features to mark and why these features should be marked (" thinking about the theoretical and cultural underpinnings of the transcription process" (Ochs 1979: 72). Lapadat and Lindsay (Lapadat and Lindsay 1998: 3) further discuss transcription as research methodology in their empirical

study of transcription styles used across disciplines. They found that transcription decisions were linked to interpretive consequences: 'transcription is theory-laden: the choices researchers make about transcription enact the theories they hold and constrain the interpretations they can draw from their data".

Ten Have (1999) stresses that even when transcripts conform to the strictest methodological standards, they can still only be regarded as a representation of the original language, not a substitute for it. Consequently, he recommends that analysts make their own transcript of the interaction, since 'the researcher is forced to attend to details of the interaction that would escape the ordinary listener, transcription works as a major "noticing device"' (ibid: 78). Psathas and Anderson, in discussing transcription in CA argue that a transcript is a "constructed version of the actualities and particularities of the interaction. It presents, in a linear display format, a transformed rendition of the original phenomena in order to provide for a repeated and systematic "access" to those phenomena for the reader' (Psathas 1990: 90). After a summary of the properties of written transcripts, they point out the need for both the transcriber and reader to be trained and gain experience in the transcription and the analytic process in order to make full sense of the interactional phenomena (ibid: 90-91). Finally, Mishler considers the pitfalls and problems inherent in much research methodology concerning medical communication. In particular, he discusses the need for accurate and detailed transcription of audio recordings, which will allow a more qualitative approach, warning the researcher of the dangers of inaccurate transcription, (Mishler 1984):

> Clearly, a range of phenomena that are integral to naturally occurring speech have no analogue on the printed page, at least in its standard familiar form. Thus, features of speech such as intonation, pitch, pacing, volume, filled and unfilled pauses, non-lexical vocalizations, false starts, repetitions, interruptions, and overlaps between speakers are omitted from the great variety of printed texts even when they include quotations. … the meaning of what speakers are saying to each other may be lost, altered, or distorted if the text does not represent certain aspects of the ways in which they are talking.(Mishler 1984: 21-2).

There are three aspects to consider:

1. How the transcripts will be used. Transcription style is dictated by the analytical approach used and what aspects of discourse the analyst is focused on. CA pays particular attention to such features as the length of pauses, overlaps, rises and falls in intonation or loudness, so these features have to be reflected in the script. Ten Have notes: 'many researchers in CA emphasize that transcriptions should not be made with a specific research problem or hypothesis in mind' (ten Have 1987: 5).
2. The transcription conventions the analyst will follow.

3. The tools the analyst will use to facilitate the transcription process (i.e. software and hardware).

The total length of the 72 recordings was just over 16 hours, so in order to begin the data analysis as soon as possible I enlisted the help of four Japanese undergraduates to carry out initial transcriptions. Before beginning the transcription process, I met them all together in order to teach them the transcription conventions of CA. The students were instructed to include as much detail of the utterances as possible, especially the occurrence and length of pauses, overlaps and even the smallest backchannelling noises, and they were given a list of CA transcription symbols (Appendix 6). After the briefing they were each asked to produce a full transcript of the one consultation (#1). After all the students had completed their transcripts they handed them over to me, and I checked the four versions against the recording for deficiencies. Examples of deficiencies in this trial transcription included cases of missed backchanneling, inaccurate timing of pauses, and transcription of complete words when the speaker had only spoken half a word. There were also cases of untranscribed overlaps, or of untranscribed non-verbal sounds (e.g. clicking of keyboard, closing of door, footsteps, etc.). I noted down these problems and I arranged a second session with the transcribers to explain the deficiencies, comparing the recording with their transcriptions and emphasising which words and sounds were important to my analysis. The weak points of each transcriber were thus identified and explained to them, while successfully transcribed sections were held up as good practice and a model for their subsequent transcriptions.

After this session I allotted batches of the recordings to the students. Once they completed their batches I met up with them to discuss the content and any problems they had (e.g. sections which were inaudible or unclear, or if they were unsure about how to transcribe a sequence). Besides speeding up the process by division of labour I decided that native Japanese speakers would be more sensitive to details in the conversation (e.g. cases of overlaps or slurred speech) that a non-native speaker (myself) might miss and be better equipped to interpret nuances. These initial transcriptions therefore provided a basis on which to identify sequences or sections that were most relevant to my research question (patient-centred language) that I would listen to and examine in more detail by myself.

3.6.6.1 Identifying words and utterances

Since my analysis was focused on the discourse and it would not involve any detailed grammatical descriptions there was no need to make a morpheme-by-morpheme transcription. It was more important to have flowing chunks of text with as few annotations as possible, so it made more sense to agglutinate lexical stems with their corresponding grammatical suffixes. After the recordings had been transcribed a word count tool was used to

find out the number of words in each text as a basic measurement of length of the conversations, and of the individual participants.[20]. Since this works by looking for spaces between words, when transcribing Japanese, usually written in unbroken running text, the resulting counts are determined by where the transcriber decides to put spaces to separate 'words'. For this reason the word count figures were determined by the transcription decisions made, which included a proportion of half enunciated and elided words, so they must be regarded as good approximations that do not have the accuracy of word counts made on purely written discourse. I measured the following aspects of the conversations:

- Length of conversation by time
- Number of words by participant (& D:P word ratio)
- Number of turns by participant (& D:P turn ratio)
- Average turn length by participant (by words)
- Speed of interaction (words per second)

The resulting word and turn counts provide an overview of the transcriptions and act as a guide to the characteristics of each conversation. Results and analysis of these numbers appear in §4.1.1.

3.6.6.2 Turn Constructional Units (TCUs)

An important part of the transcription process was deciding about what constituted a speaking turn (turn constructional unit). In an ongoing sequence of speech involving a number of participants how is it possible to decide when one turn ends and the next one begins? A TCU may be a series of sentences, a single sentence, a phrase, a half-word, or even a non-verbal signal that is made by one speaker, that comes after such an utterance made by the previous speaker and is followed by the utterance of the next speaker. A TCU has a phonological, a grammatical and a pragmatic aspect, all of which work together to signal where the TCU begins and ends. The coincidence of the completion points of grammatical, phonological and pragmatic units is a strong indicator that a turn has come to an end – a transition relevance place (TRP) – whereas the completion of only one of these aspects would not be (Gardner, 2006). I decided where turn constructional units (TCUs) begin and end by determining the transition relevance places.

Lerner (1996) talks of compound TCUs, which have a preliminary component and a final component, often separated by a micro pause. The preliminary component projects what it will take to complete that component, and therefore defines the possible form the final

[20] During the counting process, I was careful to eliminate the surrounding metalinguistic notation and any other notation that was necessary for the transcript, but was not part of the actual language produced by the participants. For example, the participants' labels ('P:', 'D:'), comments made in parenthesis (sound of writing), pause lengths <0.8), (3.0)), and so on.

component will take. The possible completion of the final component indicates there is a TCU-internal transition relevance place, which could be completed by another speaker. While the first speaker can actively elicit the completion by the recipient (e.g. by intonation), the recipient may begin speaking at this point even if the first speaker continues without such signals. In other words, speaker 2 can begin talking while speaker 1 is in the middle of a TCU without actually overlapping him or her. In other words, speaker transition is achieved "that regularly results in one and only one participant speaking at a time" (Lerner 1996). He calls these 'anticipatory completions'.

I counted one turn, or TCU, as the space between two TRPs where there is a change in the roles of speaker and listener (sometimes a TCU contains one or more possible completion points (e.g. a micro-pause or a downward shift in pitch), which are not taken up by the listener, but could have been). Also, there were sequences where there was backchannelling by the listener that did not appear to interrupt the speaker, so I did not count the backchannel as a separate turn.

After I explained the transcription conventions to the students, I asked them all to transcribe the same recording in *Romaji* so I could ensure standardization. Romaji is the Latinised script used to write Japanese – my oral ability in Japanese is much higher than my reading and writing ability, so once the script was alphabetized I was much more in control of the language and able to carry out a more efficient analysis of the conversations. After they finished this work, we compared their transcripts and discussed what they needed to concentrate on in order to improve them. It also gave me an idea of how much time each student needed to make the transcriptions. After receiving the transcripts I checked them against the recordings to ensure accuracy and then they were loaded into the concordancer to make a corpus.

3.6.6.3 Translations

All the Japanese sequences I present in this thesis have an English gloss running in a parallel column on the right. This is a departure from the usual practice of presenting foreign language data, where each utterance is transcribed with three lines of text: (i) the original language; (ii) a morpheme by morpheme translation; (iii) a gloss into a more natural English (for example Takagi (2001), in CA or Shibatani (1990), working in Japanese linguistics). My Japanese data omits a morpheme-by-morpheme translation. There were two reasons for deciding to do this: first, as stated above, I wanted to preserve the flow of the original conversation in English; second, my focus is on discourse features such as questions or backchannels, not discrete syntactic or semantic features. Regarding the first point, many of the sequences I present are long, sometimes extending over ten or twenty turns, so an

uninterrupted parallel English translation is easier to read than a format that is interrupted by an extra line of grammatical glosses (as for example in S. K. Maynard's (1998) Japanese discourse study). My English translations aim to be as naturalistic as possible, in order to capture the force of the original discourse rather than attempting a one-to-one correspondences between Japanese and English morphological or grammatical features. As I explained in 2.3.2 spoken Japanese often drops the subject or topic of the sentence, so a literal rendition into English of the original text often results in ambiguity. For this reason when I made the translations I sometimes added pronouns and determiners in order to make the English more comprehensible (this extra information is written in single brackets in English translations). I also interpreted fillers (ma, ano, ee to: desu ne, desu kedo, chotto) and backchannels (hai, ee, un, a:) according to the context in which they appeared, attempting to give the equivalent pragmatic features in English.

I produced all the translations by myself, but where I had doubts or lacked confidence about a particular usage at a specific point in a specific utterance I consulted Japanese colleagues about my interpretation. While my aim was to make the English versions as natural as I could, sometimes I felt it necessary to mimic the Japanese word order. For example, in order to preserve an overlap on a Japanese verb in sentence-end position I sometimes engineered the English SVO word order into SOV order if I felt I could preserve the sense in English. Also, Japanese puts the topic of the sentence first, indicated by は (wa), and which may usually be translated in English as 'As for …', so wherever I could I tried to keep the topic up front in the English translations. Furthermore, since the original language and transcription is dynamic conversational Japanese with many stops and starts, slurring, half-finished words and broken off sentences, I also tried to capture this in the English translations. For this reason, some of my translations appear awkward, but I hope they capture those features of the discourse that are most important to my study, such as backchanneling, hesitations and overlaps, in an authentic way.

3.7 Description of the Japanese data obtained

The recordings took place on September 10, 13, 20, and 27, 2001. On those four days a total of 72 conversations were recorded – 35 history-taking interviews with junior doctors and 37 diagnostic and treatment-oriented consultations with senior doctors. Appendix 7 is a spreadsheet of the main features of each of the consultations, and Tables 3.2, 3.2 and 3.3 summarize information across all the recordings by patient, doctor, and consultation length.

Table 3.1: Patients – basic data

Age	**20-29**	**30-39**	**40-49**	**50-59**	**60-69**	**70-79**	**80-89**	**Total**
Number	4	10	4	9	6	4	1	**38**
Male	3	6	0	5	4	2	1	**21**
Female	1	4	4	4	2	2	0	**17**

25 patients had two consultations, one with a junior doctor and one with a senior doctor
4 patients had three consultations, one with a junior doctor and two with a senior doctor.
6 patients had only one consultation with a junior doctor
2 patients had only one consultation with a senior doctor: P#20 (Male 34); P#23 (Male81)
Referrals = 15 (42%); Non-referrals = 14 (39%); Non-referrals but previous hospital visit = 7 (19.5%)

Table 3.2: Doctors – basic data

Doctor	**A1**	**A2**	**A3**	**A4**	**A5**	**A6**	**A7**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**TOT**
Male	X	X		X	X	X		X	X	X	X	X	X	**11**
Female			X				X							**2**
Consultations	7	7	3	2	7	5	4	16	2	2	10	6	1	**72**

T=13 Junior doctors (A) = 7 Senior doctors (B) = 6

In the fours days I had scheduled with the department I was able to collect 72 recordings, well exceeding my initial target of 50. I was surprised at the willingness of patients to consent to their conversations being recorded; my medical student assistants reported that almost all the patients who were approached agreed to sign the consent form. Perhaps the main reason is that this is a teaching hospital, and patients may expect research to be undertaken. Also, despite making clear to the patients through written and verbal explanations that they were not obliged to give their consent, they might have felt some kind of obligation to agree. It is possible that the patients might have been interested in this research, as there has been recent media interest in doctors' communication skills (see §2.4).

Table 3.3: Length of consultation

Length *No. of Consultations*	**-10 mins**	**10-15 mins**	**15-20 mins**	**20-25 mins**	**25 mins-**
Total	28	21	11	9	3
A Doctors	14 (F=5)	10	7 (F=2)	4	0
B Doctors	14	11	4	5	3
Male P	16	9	4	7	2
Female P	12	12	7	2	1
P Age 20-39	17	4	2	3	1
P Age 40-59	6	10	8	2	1
P Age 60-	5	8	1	4	2

Range: 2'11"-36'33"

3.8 Method of Analysis

3.8.1 Procedure

After I had recorded the consultations, I did not carry out follow up interviews with the doctors to get explanations about their communication strategies and consultation style. There was no time to meet the doctors on the day of the recordings, and there was a delay of some weeks in getting the recordings back from the sound engineer, by which time it was already late to set up contacts with them. Although, after the recordings were completed, I did manage to have a discussion with the professor about training procedures and obtain training materials used by the interns in his department, clearly, this was not as detailed as getting direct input on the recordings by the doctors involved, and my analysis was therefore limited by this fact. Post-recording comments by participants can give valuable insights into their thought processes during specific episodes, and shed light on their general approach to the consultation (how patient-centred are they and how aware are they about the the mutual participation model).

However, the method of analysis I employed, *conversation analysis* (CA), is not dependent on what the participants themselves thought they were doing in their interactions. As I explain below (§3.8.2), using CA it is most important to analyse the data as it is, and not interpret it using external sociological or psychological information not contained within it. The language has to speak for itself, so that the identities, roles and motivations of the participants are allowed to emerge without recourse to preconceived ideas or post-hoc interpretations of behaviour by the participants.

I used quantitative and qualitative methods in order to get a detailed bottom-up description of particular conversational sequences, and a broader statistical overview of general patterns in the data. I used concordancing software to identify words and phrases across the consultations in order to identify patterns in the discourse. In the qualitative study, as well as drawing on CA to understand exchanges that are salient to patient-centredness by looking at selected sequences of talk in interaction, I also used *genre analysis* to establish the consultations as a distinct discourse genre (chapter 4).

Genre analysis ("A genre comprises a class of communicative events, the members of which share some set of common communicative purposes" Swales, 1990) is reviewed in §4.3 as the theoretical basis on which I established the phases of the Japanese consultations. I analysed fourteen of the consultations as a representative sample of the data as a whole in order to identify sequences of interaction that conformed to phases established in English consultations, Byrne & Long (1984), Larsen et al (1997), and to see if any of those phases needed to be refined to incorporate the Japanese data. Drawing on ten Have's schema (Table

2.2) I characterise the differences in power dynamics between each phase, considering both the quantity of patient and doctor talk in each phase, and the way in which the participants make transitions between topics and between phases. Before describing the characteristics of each phase, I identify transition phrases and examine how they are used (§4.2). These phrases are important as they were used to divide the fourteen sample consultations into sections, which constitute phases. After establishing the phases from the fourteen Japanese consultations, I explain each phase, illustrating the features drawing on the corpus as a whole (72 consultations). The sample of fourteen consultations were chosen to reflect the variety across the data as a whole: four different junior doctors (one female, 3 male), three different senior doctors (all male) and thirteen different patients (six female, seven male) ranging in age from 20 to 71 years old. One patient appeared twice, once with a junior doctor and once with a senior doctor.

Regarding CA, I my approach is more accurately described as using the 'mentality' of CA, since I do not follow CA practice strictly (in particular, my transcriptions (§3.6) are not conventional), but rather I use many CA concepts in my attempt to understand the data. CA has been frequently been used to examine talk in institutional settings, especially in clinical discourse (Maynard 1991; Heritage and Drew 1992; Maynard 2003; Maynard and Heritage 2005). CA is descriptive approach to conversation that tries to capture the utterance-by-utterance dynamics of talk in interaction, without imposing psychological or sociological motives on the purposes or roles of the participants. This makes it stand out from other discourse approaches where the analyst comes to the data with a set worldview of human behavour, which it uses to interpret specific exchanges, such as critical discourse analysis or social exchange theory. CDA shows how social and political domination are reproduced in discourse, therefore it shows how the ideas or world-views of the language user show themselves in the language he/she uses. Meanwhile, SET explains human interaction as a process of negotiation where social stability is reached rationally by the parties through comparing the benefits of available alternatives. Neither these two approaches, nor any other top-down, theory-laden sociological or economic models were suitable for my aims, because, even though I am investigating 'power', 'patient-centredness' and 'asymmetry', which assume a pre-existing and pre-determined relationship between the participants, I wanted to see if these concepts emerged through the language. In other words as far as I could, I worked from the data up towards general conclusions, rather than trying to impose sociological constructs on it and interpreting the language within those constructs. Therefore, CA appeared to have the advantage of being descriptive; it approached conversational data with a blank slate.

In §3.8.2 I give a brief overview of the basic principles of CA, then in §3.8.3 I make a distinction between 'pure' and 'applied' CA, discussing why an 'applied' approach gives a richer understanding of institutional talk-in-interaction, and thus why it is more suitable for this study. Finally, in §3.8.4 I explain how I combined this qualitative approach with quantitative analysis, and how these two approaches complement each other and enrich our understanding of the data.

3.8.2 Conversation Analysis

Conversational analysis has often been used to describe the dynamics of talk in institutional settings (Heritage and Drew 1992), and it has been a valuable tool in understanding medically related conversations since the very earliest studies (Schegloff 1968; Schegloff and Sacks 1973). It is concerned with giving an account of how coherence and sequential organization in discourse is produced and understood. Levinson characterises CA as being rigorously empirical, avoiding premature theory construction. It is essentially inductive, searching for recurring patterns across many records of naturally occurring conversations. It emphasises the interactional and inferential consequences of the choice between alternative utterances (Levinson 1983: 286-7). Thus, in CA the emphasis is on what can actually be found to occur, examining many instances of particular phenomena across texts rather than making intuitive judgments, as they are seen as unreliable and unnecessary. McCarthy writes that in CA 'the emphasis is not upon building structural models but on the close observation of the behaviour of participants in talk and on patterns which recur over a wide range of natural data [… seeing …] how pairs of utterances relate to one another, how turn-taking is managed, how conversational openings are effected, how topics enter and disappear from conversation, and how speakers engage in strategic acts of politeness, face-preservation, and so on' (McCarthy 1991). These features are the foundation on which the analysis of the Japanese data is built, so I now introduce them here.

Turn-taking

One of the most important developments in CA was the recognition of turn-taking as the basis for conversational management, and the idea that the next speaker is selected by a variety of 'turn allocation techniques' (Sacks et al 1974). Turn allocation is particularly important: participants need a way of changing speaker without allowing more than one person to speak at the same time. Coulthard describes three turn allocation options, in order of power (i.e. the first over-rides the second, and the second over-rides the third), that are open to the current speaker when selecting the next speaker: directly naming the next speaker and (usually) also constraining the next type of utterance by using the first part of an adjacency pair (see below); not selecting the next speaker but constraining the next utterance;

not selecting next speaker and not constraining the next utterance (Coulthard 1985).

Sacks et al call their model of turn-taking a 'Local Management System' which is 'interactionally managed' and they consider three important consequences of the model (Sacks et al 1974: 725) which Coulthard summarizes as two basic facts of conversations: (i) the roles of the speaker and listener change, with 'remarkably little overlapping speech and remarkably few silences'; (ii) speaker change recurs'. A conversation is made up of at least two turns, but in the above selection choices work only from utterance to utterance; we cannot select the next but one speaker. On the listener's part, in order to have a smooth transition of turn, he or she must understand when the speaker's utterance has reached a completion point and then be able to produce immediately a relevant utterance. This point is the *transition relevance place* (TRP). The main point is that successful conversational participation involves a great deal of skill and judgment (Coulthard 1985).

3.8.3 Applied Conversational Analysis

CA follows the principle that we cannot ask "why", but only "how". Also, the strictly empirical basis of the enterprise – i.e. that we can interpret only what we have evidence for in the text - involves a certain suspension of our knowledge of the world. (See Thomas and Wilson (1996) for a discussion on the empirically rigorous nature of CA). Also, Levinson writes: "… in the long run CA analyses may perhaps be found deficient as rather simple reconstructions of the no doubt immensely complicated cognitive processes involved in conducting conversations." (Levinson 1983). However, a careful and precise description of talk in interaction does show how the participants work together to achieve meaning. The more we notice about the utterances and non-verbal behaviour of the participants, and how they are sequenced the richer our understanding of the interaction becomes.

On the other hand, CA does not seek to delve into the individuals' cognitive processes or fathom the intentions of a speaker at any given moment (although this might be able to be determined in a follow up analysis where the participants are asked to explain what they were trying to do at that time). Therefore, a pure CA approach would be at odds with my secondary research objective, which is to detect national cultural influences on Japanese doctor-patient discourse. Observation of behaviour allows such cultural hardwiring to be detected only indirectly, if at all. In other words from the outset my investigation assumes that there is a cultural effect on interpersonal interaction, and this conflicts with a basic principle of CA to approach the data without bringing any assumptions about who is talking (their backgrounds and identities), why they are talking, where they are talking (the country, the institution, their physical distance), and so on: "unmotivated looking" (Gardner 2006: 267). Instead, all these aspects, if they are at all relevant to the interaction will reveal themselves

through their behaviour and the utterances the analyst observes them making. Ten Have (1997) and Maynard (Maynard 2003:64-87) both address the issue of how much contextual information can be used in CA. Silverman also recognises a similar problem in the use of context in CA through his discussion of membership categorisation analysis, arguing that the two methodologies need each other and trade off each other (Silverman 1998: 128-152).

A 'pure' CA analysis can only be carried out through the behaviour of the participants, so contextual or ethnographic information therefore becomes redundant. This does not change whether we are examining mundane conversations or conversations that happen in situations where particular social rules create the context. Consequently, it might appear that in CA the idea of institutional talk is irrelevant, as the analyst looks to see how participants create turn taking opportunities within the conversation (the sequence of utterances). However, ten Have explains how CA can be applied in order to study how interactions are organised in institutional contexts – showing how social life is organised in particular settings, and what features characterise any particular setting (ten Have 1999:162). This is 'applied' CA.

In institutional settings there is an understanding that patterns of behaviour will be constrained by the nature of the setting (ten Have 1991: 162-201) in a way that mundane casual conversations are not. This allows the researcher to analyse turn on turn interactions in a detailed descriptive way (CA), while allowing an interpretation of the data in terms of speech communities, language repertoires, language varieties or register, which are established features of the institutional setting. Context also allows the researcher to understand how speakers adopt their speaking 'identities' and change them during the course of the conversations. Contextual knowledge allows a much richer understanding of how the participants are relating to each other, and gives us a legitimate reason not to approach a new conversation as if it had appeared from nowhere (i.e. that all analysis has to be based only on what can be seen in text before us).

3.8.3.1 Analysing Institutional talk

Since the key question in CA is <u>how</u> the participants' utterances (behaviour) create a certain speaking situation – how they 'do' conversation, conversation analysis of institutional interactions focuses on how particular utterances and exchanges show that one participant may lead the conversation (has more power to allocate turns), while the other participant's utterances and turn-taking strategies show that he/she is being led (has less power to allocate turns). This leads to such notions as 'doing being a lawyer', 'doing being a TV interviewer,' or 'doing being a doctor'. Through examining the utterances in sequence, we can see how the role of each participant in the exchange emerges. In TV interviews, for example, the

interviewer has the conversational initiative because of the recognition by both parties that his/her role is to ask questions and the interviewee's role is to answer them. The interviewee is not expected to ask the interviewer for his/her views on the topic, and if this did happen to any extent the conversation would cease to be recognised as an interview, and it would become something else altogether (Greatbach 1988).

To pursue this further, consider the following example. During a legal trial, one participant is able to interrupt the proceedings at any time with the bang of a hammer, and a directive utterance to one of the other participants. That same participant is also the only one who has the power to stop the proceedings completely, by uttering some formulaic phrase such as 'Court adjourned' or by some non-verbal action such as standing up and walking out the door. He/she of course is the judge, and the more that judge's (speaking) turns are examined, the more apparent his/her role becomes. Similarly, we see that the trial itself has different sections and that, for example, there is such an event as a cross-examination, because another participant, who can be identified as a lawyer, has the right to question a witness, cut him/her off and ultimately end that section of the proceedings. There is a clear asymmetry between the participants that is understood and each participant slips into the appropriate role. In this way, CA can be used to see how the speakers in a given institutional setting reveal themselves. In my own study I try to use CA to understand how the participants reveal an asymmetry of power as they "do being a doctor" and "do being a patient" in the institutional setting of the outpatient department of a large Japanese hospital.

3.8.3.2 Ethnography and CA

Moerman (1988) raises the issue of whether CA really does ignore the cultural setting ('the set or system, of principles of interpretation, together with the products of that system') so that when an American analyst handles American conversation he may fail to realise that he is working within this particular cultural framework, yet how else could he recognise an utterance as a pre-invitation, for example, unless he had insider knowledge of the illocutionary force? The problem of combining an ethnographic approach with CA has also been discussed by Maynard (2003: 64-87). At the heart of the issue is that the ethnographer wants to set a given social event (such as a conversation) in its context or social structure, while, the conversation analyst wants to perform sequential analysis of the text in isolation, without bringing in any information that does not appear there. Maynard explains Schegloff's argument about why a pure CA methodology would preclude attempts to give the conversation a context:

> if social structure and other aspects of "context" are real to the participants, they will be procedurally consequential, as reflected in participants organizing speech exchange (turn-taking) and other features of talk, such as repair […

> which …] may be encouraged or suppressed in specific environments (Maynard 2003: 70-1).

For an ethnographer, such exclusive focus on 'autonomous-seeming structures' misses the forest for the trees, exhibiting 'the "occasionalist illusion" that the essence of interaction is entirely contained in it' (ibid: 69). However, the problem with this view is that there is an assumption that contexts can be clearly defined, when in fact they may well not be, which gives rise to a corresponding 'social-structural illusion' where 'there is virtually no time out from a participant's potential placement according to race, gender, class and society's other structural positionings' (ibid: 71). So for the CA researcher, if social structure were dominant, he or she would be distracted from the details of the localized phenomena (the utterances), which are of most immediate importance to the participants involved. Maynard sees a way through this ideological impasse by noting that both methodologies show that participants do orient themselves to the most immediate contexts of each utterance. For conversation analysts, this is the concrete sequential context in which the participants place their utterances, and their decisions about where to place those utterances achieves *intersubjectivity* – mutual understandings and orientations – which is what makes joint activity possible in the real social world (ibid: 73). He notes three ways in which CA makes use of ethnography (ibid: 73-76):

(i) Descriptions of settings and identities of parties

If the analyst decides not to focus on any ethnographic information (i.e. decide beforehand the location or the age or gender of the participants) they risk an infinite regress of having to inquire about prominent features in the text to see whether any one of them can be enquired about. For example, how could styles of interrogation and defending in a courtroom be analysed unless the analyst had decided beforehand that this is indeed a courtroom, that the participants have specific roles and they are indeed involved in the process of legal debate? The researcher has to establish some basic analytical parameters; otherwise there is no basis for analysis.

(ii) Explications of terms, phrases or courses of action unfamiliar to an investigator or reader

Analysts unwittingly use their own knowledge of the significance of actions or expressions the participants use in order to analyse particular excerpts – if we know a conversation is about tape recorders, we understand the expression "it speeded up" in a different way than if we know the conversation is set on a factory production line. Without such knowledge an utterance is ambiguous and the researcher cannot make any analytical statement about it.

(iii) Explanations of curious patterns that prior sequential analysis may reveal

Knowing abstract information about the conversation (such as the underlying aims of either of the participants) can help interpret patterns seen in the sequential analysis that would otherwise seem incongruous and remain a mystery. The obvious way of doing this is through interviewing the participants or doing other forms of background research so the analyst has a fuller understanding of what the participants are trying to do (e.g. how could the analyst make sense the utterances made during a game of poker unless he/she knew something of the strategies of bluff and deceit employed in the game?). Mishler makes a similar point while discussing Frankel's CA study of the organization of gaze touch and talk: while the conversation analyst is supposed to be neutral as regards context and participants, in fact, "In assuming that neither the "context, direction or meaning" are problematic in the medical encounter Frankel relies on the perspective of the physician to provide grounds for his interpretation' (Mishler 1984: 55).

CA can, therefore, be enriched by ethnographic knowledge, and this assumption is at the heart of my own study – I employ sequential analysis of turn-taking, while setting the conversations within their national cultural and institutional context, so that I may be better placed to interpret how the participants place their utterances. But how best can these approaches be combined to make an effective study of doctor-patient discourse in these recordings? A precisely applied CA approach enables us to find out what is going on in a localised (specific) section of a consultation. On the other hand, ethnographic information brings to bear details of setting, participants, aims, and so on, which brings a richer understanding of the aims or motives of the participants that would not be possible if we were only to examine the data as it emerges on a turn by turn basis. In addition, statistical analysis of corpus data lends itself to comparative study of the frequency of discourse features such as questions, backchannels, laughter, apologies or topic change markers. For my purposes, I have confidence that these approaches are complementary, and analyzing the data from a variety of perspectives will give us an understanding of not only *what* is going on, but also *why* it is going on.

3.8.4 Combining Qualitative analysis and Quantitative analysis

Gall and Borg (1996) define quantitative research or '*positivist research*' as 'collecting numerical data on observable behaviours of samples and then subjecting these data to numerical analysis' (ibid: 28). Behavioural (language) data can be quantified and subjected to statistical analysis. On the other hand, a qualitative approach studies things in their natural settings, attempting to make sense of, or interpret phenomena in terms of the meanings people bring to them' (ibid: 28-9). They later elaborate on this distinction

presenting qualitative research as essentially subjective, while quantitative research is objective. So qualitative researchers, who assume that 'social reality is constructed by the participants in it' (ibid: 30), study individual cases, make holistic observations, use analytic induction, and prepare interpretive reports. Quantitative researchers on the other hand assume an objective social reality, attempt to be detached from the participants and their setting, study populations or samples that represent populations, use statistical methods to analyse data, and prepare impersonal, objective reports.

How do quantitative and qualitative approaches complement each other?

In this study, I combine the 'richness and precision' of qualitative analysis with the 'statistically reliable and generalisable results' that can be obtained through quantitative analysis (McEnery and Wilson 2001). While these approaches have different objectives and reveal opposite perspectives of the data, they allow the researcher to get a top down view and a bottom up view and enable a deeper understanding of the conversational patterns. As McEnery and Wilson explain, 'a stage of qualitative research is often a precursor for quantitative analysis, since before linguistic phenomena can be classified and counted, the categories for classification must first be identified' (ibid: 76). They also observe that 'there has recently been a move in social science towards multi-method approaches which largely reject the narrow analytical paradigms in favour of the breadth of information which the use of more than one method may provide' (ibid: 77).

There are well-established arguments for using a multi-method approach to examine language data. Schiffrin argues that the six discourse methodologies she presents (including CA, ethnography of communication (qualitative) and variation analysis (quantitative)) may be united by shared principles, and their view of language as social interaction (Schiffrin 1994: 414-418). Meanwhile, Cameron points to the interdisciplinary nature of discourse analysis, explaining how five approaches to spoken discourse are derived from the fields of anthropology, philosophy, sociology, linguistics and critical theory (Cameron 2001: 47-52). Discourse analysis draws on a variety of academic disciplines, so it may be unreasonable to expect that any one method will give more enlightenment than if the data is approached from a variety of perspectives. Ten Have compares pure CA and applied CA, and Thomas & Wilson discuss the validity of combining corpus analysis with qualitative study (ten Have 1999: 162, 184-201) (Thomas and Wilson 1996).

Unlike mundane conversations, doctor-patient consultations have clearly defined boundaries, clear goals and clear outcomes: particular conversational routines appear and reappear in a more predictable way - there are opening sequences where the doctor calls for the patient to present his/her problem, interrogation-like questioning sequences by the doctor,

long sequences where the patient explains his/her symptoms while the doctor backchannels, or negotiation sequences led by the doctor trying to establish a mutually agreed upon course of treatment, and so on. In any given mundane conversation some or all of those sequences may occur, but they could not be predicted to occur in the same way as they can in a medical consultation. This predictability makes it possible for the researcher to collect multiple instances of authentic data of specific types of interaction easily and in a short space of time, without having to engineer an artificial scenario or conversation topic. For the present research, having multiple examples of the same sequence type allows me to make quantitative analysis using a concordance. Specifically, I was able to identify common collocations and get accurate measurements of word frequencies in complete consultations and in sections of the consultations, and once identified, they could be examined in detail in their context using CA methodology. In this way word counting complements microanalysis of the discourse by identifying where particular discourse features appear in the text and how common they are. In addition to these discourse features, the most basic measurements of the consultations were used as a discourse 'map' and enable a top down view of the interactional dynamics between the participants (number of words by participant (doctor, patient, 3rd person); the average number of words per turn by participant; the number of overlaps per conversation, and the number of questions by participant). I discuss these aspects in §4.1.1.

4. THE STRUCTURE OF THE CONSULTATIONS

4.1 Overview

This chapter makes a quantitative analysis of the data, which I referred to in §3.7.3. The chapter has two aims:

(i) to make a statistical overview of the Japanese data in order to compare the consultation length (by word count, turn count and time), and the proportion of utterances according to participant;

(ii) to categorise the phases of these consultations and compare the data with Byrne and Long's consultation model, which was presented in §2.1.3.

Regarding the first aim, the features examined in the statistical overview reveal how 'dynamic' the consultations are, in other words the rapidity of the exchanges and the degree of involvement of each of the participants. This approach was similar to Kindler et al (2004) who carried out a statistical analysis of doctors' utterances in recordings of anaesthetist-patient communications, using the Roter Interaction Analysis System to code them. Meanwhile, the second aim is achieved in three stages: in §4.3 phrases are identified that indicate the end of one phase and the beginning of another (*phase transition signals*). Two of these signals, *sore ja*/*sore dewa* and *wakarimashita*, are examined for frequency of occurrence and the context in which they appear; in §4.4 one example of each of the two types of consultation (the preliminary (JD) consultation and the follow up (SD) consultation) is analysed to introduce the distinct stages, or 'phases'[21], which are bounded by those phase transitions signals; §4.5 analyses the structure of a sample of fourteen consultations - nine junior doctor consultations and five senior doctor consultations – to see how phases and sub-phases can be recognized, which phases are optional, how variable the sequencing is, and whether phases can recur or not. The findings about phase structure established from this sample are augmented by an examination of quantitative data calculated across all 72 consultations.

[21] While genre analysis typically refers to sections of discourse as 'stages' or 'moves' Swales (1990) I follow Byrne & Long (1976), ten Have (1997) and Pilnick (1998) referring to such identifying features of medical consultations as 'phases'.

4.2 Features of the JD and SD consultations

4.2.1 Overview of the two sets of consultations

All but one patient saw both a junior doctor (JD) and a senior doctor (SD). The structure and the purposes of these two consultations were quite distinct. Most of the patient's history-taking was done by the JD, although in the follow up consultation the SD usually reviews the information taken by the JD, and the results of any tests that were carried out in the intervening period. However, the distinction between the two types of consultation is not always so clear-cut: some SD consultations exhibit features of the JD history-taking phase and in one case (consultation #51) the patient's only consultation is with the SD, which naturally includes the taking of his history. This means that the first consultation has much more patient participation

Compared to the JD consultations the SD consultations have much more doctor-talking time, and there are frequent periods of silence during which the doctor carries out a physical examination. For instance, in #29 the physical examination lasts 5mins 35secs, and only one minute of this time is taken up with talking. Also in 29, there are other long gaps in the conversation, where the doctor carries out other tasks. For example, he goes out of the room to make a photocopy for 40 seconds, and he spends 2mins 10secs writing out various notes for the patient concerning the next day's endoscopy. In total, in this conversation there is 8mins 6secs of no verbal interaction out of 21mins and 16secs (38% of the consultation time).

Appendix 7 summarises the following information about the recorded consultations:

- **Consultation**: Number (1-73), recording date, transcriber, length (mins/secs), total number of turns, total number of words, number of overlaps.
- **Doctor information**: Codename (Junior doctors = A1-A7; Senior doctors = B1-B6), age, sex, total number of words spoken, number of speaking turns.
- **Patient information**: Code number, (1-38) age, sex, complaint, total number of words spoken, number of speaking turns.
- **Third person**: If there was another participant besides the doctor and the patient, who he/she was (e.g. nurse, patient's relative, another doctor), as evidenced by the information available on the recording total number of words spoken, number of speaking turns.
- **The presenting complaint**
- Whether or not the patient was a **referral.**

4.2.2 Statistical trends in the consultations

Appendix 8 (junior doctors) and Appendix 9 (senior doctors) are a statistical

representation of the basic features across all the consultations; consultation length (time); number of words by each participant; number of turns by each participant. This enables an initial quantitative comparison of the 72 consultations and allows us to see what features are common to the JD and SD consultations respectively. *Table 4.1* gives a summary of the features of the two sets of data based on the three categories.

Table 4.1: Comparison of senior doctor (SD) and junior doctor (JD) consultations

	Mean (JDs)	Mean (SDs)	Mean (All Doctors)
P. Age	49.1	48.4	48.7
Length of conversation	12'52"	13'21"	13'06"
Turns	230.0	185	207.4
Words	1735	1477	1605
D Words *(%)*	796 (*48.3%*)	1107 (*74.7%*)	951 (*61.5%*)
P Words *(%)*	922 (*50.6%*)	365 (*24.9%*)	644 (*37.8%*)
3rd Person Words *(%)*	16.0 (*1.1%*)	4.62 (*0.32%*)	10.31 (*0.7%*)
Turns – Doctor	115.0	97.1	106.0
Turns – Patient	112.3	86.9	99.6
Turns – 3rd Person	2.7	0.7	1.70
D:P Ratio* (Words)	**1.0**	**3.98**	2.51
D Turns /P Turns	1.0	1.16	1.10
Ave Turn (Words)	7.7	8.35	8.01
D Ave Turn (Words)	7.2	11.82	9.51
P Ave Turn (Words)	**8.1**	**4.24**	6.16
Words/Sec	2.29	1.92	2.11
Words/Sec (D)	1.11	1.42	1.26
Words/Sec (P)	1.16	0.5	0.83
Secs/Turn	**3.5**	**4.88**	4.20
Overlaps	20.7	22.14	21.65
Turns/Overlap	17.3	16.82	17.08

*In conversations where a third person appears, the ratio is D:(P +3rd Person)

- **Number of words spoken by each participant**. How vocal the doctor, patient or third person in each consultation was. The figures presented in Table 4.1 show that on average there is more talk in the JD consultations than the SD consultations. Perhaps more significantly it can be seen that in the SD consultations most of the talking is done by the doctor (75%), whereas the amount of talk in the JD consultations is almost equally balanced between doctor and patient.
- **Number of turns by doctor, patient and 3rd person.** How often each participant in each consultation spoke. Table 4.1 shows that the average JD consultations have considerably more turns than the average SD consultations. This is discussed further in Chapter 5. Also, while the JD consultations show a fairly balanced number of turns between doctor and patient, in the SD consultations the doctors have slightly more turns than the patients because there are some pause or silences during which time the doctor is examining the patient, or writing down some notes.
- **Conversation Length (seconds).** The average consultation lasts just over 13

minutes, with the average JD consultation slightly over this and the average SD consultation slightly under this. Looking at the lengths of each consultation (Appendix 7) it can be seen that the longest consultation, #73, lasts over 36 minutes, whereas the shortest, #44 is just over 2 minutes long (median = 22'38"; mean = 13'19"; St. Dev. = 6'50").

Using the data on number of words, number of turns and consultation length the following calculations were made:

D Turns: P Turns

This number depends on making accurate decisions in the transcriptions about the boundaries between turn constructional units (see §3.4.6). A number close to 1.0 would indicate a balanced conversation where one participant makes one complete TCU, which is followed by a TRP, then the next participant makes a complete TCU, which is followed by a TRP, taken up by the next participant and so on. Where the number is greater than 1.0 we would expect to see TRPs presented by the doctor (e.g. pauses), which are not taken up by the patient, while a number less than 1.0 might indicate that TRPs presented by the patient were not taken up by the doctor. The data in *Appendices 4.1* and *4.2* show that the high numbers tend to occur in the SD conversations (the highest nine numbers are all SD conversations), and the low numbers in the JD conversations (the lowest nineteen numbers are all JD conversations).

D:P Word Ratio

The relative number of words spoken by doctor and patient in each conversation (D:P Ratio) reveals how active the participants are. If the number were close to 1.0 we would expect the conversation to be balanced, with neither of the participants dominating. As we can see in *Table 4.1*, the biggest overall difference between the senior doctors and the junior doctors is the D:P ratio by words spoken. In the SD conversations the doctor speaks almost four times as much as the patient, but in the JD conversations patient and doctor utter an almost equal number of words. The mean gives a good representation of the pattern across the individual conversations (Appendices 8 & 9), which shows a very clear dividing line between the two types of conversation at about 1.65 – only three JD conversations have a higher ratio than 1.65 (#43 = 3.21, #22 = 2.1, #44 = 1.92), and only four SD conversations have a lower ratio than 1.65 (#51 = 0.46, #25 = 0.87, #63 = 1.29, #66 = 1.41). This figure is not surprising in itself, as it merely reflects what I have already explained about the different objectives and functions of the two consultation formats. The SD conversations are more doctor-centred, concerned with explanations and discussions of treatments or test results, and therefore involve more doctor-talking time. We would therefore expect more long turns from the doctor

and a lot of backchannelling from the patient.

On the other hand, the JD conversations focus on the patient's medical history, and the doctor is trying to elicit information from the patient. In these conversations we would expect to see many short, open-ended questions from the doctor, to which the patient responds at reasonable length, while the doctor uses a lot of backchannelling. However, if this were the only thing those conversations involved we would expect the average JD D:P ratio to be well below even, whereas in fact it is almost exactly 1.0. This tells us that the doctor is actually doing half the talking; he/she is not merely asking short questions, he/she is also making comments, or giving explanations. In Chapter 5, I consider whether this could be explained by an asymmetry of power between the participants.

The difference in the average D:P ratio itself reflects the huge difference in the average number of words spoken by the patients in the two types of consultation, (the JD patients are two and a half times as vocal as the SD patients – especially consultation #3 – while there is a much smaller difference in the average number of words spoken by the two kinds of doctor (JD = 796 words; SD = 1107 words). Combining these numbers with the D:P turn numbers we can clearly see that JD consultations have longer turns by patients and SD consultations have longer turns by doctors. This is predicted by ten Have's asymmetry of initiative model presented in Table 2.2 (§2.2.4), where the patient only has initiative during the presentation of the complaint (Byrne & Long's phase II, §2.2.3).

Average Turn length

The average turn length for each conversation in itself does not yield much information about the conversations. A high number merely tells us that there were many long turns, and a low number that there were many short turns. It is more important to know which of the participants were making long turns and short turns. Average turn lengths by patient follow a similar (but not identical) pattern to the D:P ratio, with the longest the patient turn lengths coming in those conversations with the lowest D:P ratios (i.e. in the JD conversations, where the patient is explaining his her illness and the doctor is listening and taking notes). Similarly, long turns by the doctor would reflect sequences where the doctor explains information while the patient listens and, unsurprisingly, we can see the highest numbers in the SD conversations.

Words per second (W/S**)**

A high number indicates that there are fewer silences, including those where the doctor is carrying out a physical examination or engaged in some other non-consultation task. in a conversation, while a low number suggests long stretches of silence, such as we would expect in a consultation that included physical examinations. *Table 4.1* shows that SD

consultations have a lower average W/S than the JD consultations.

The length of the consultations (average 13'06") suggests that the senior Japanese doctors' explanations may be more detailed, informing the patient about their illness and treatment plan. This seems to contradict the assumptions of Japan as a high context culture, explained in §2.3.2, and the observation that silences and non-verbal communication are more evident in Japanese conversations, (§2.3.3). But in the diagnostic stages of this institutional setting how could it be otherwise? The doctor talks and the patient listen: he or she is required to transfer the relevant medical information efficiently and unambiguously to the patient. This is an early indication of how the institutional setting delimits the respective talk of the participants, and this seems to be over-riding any cultural features.

Also, there is a large difference between the JD and SD patients. The SD patients have much shorter turns, and what is more, from the D:P word ratio we can see that they contribute much less to the consultation than the JD patients. This adds to our understanding that the SD consultations are very much more dominated by doctor talk. I explore this further in Chapter 6, by looking at sequences during the diagnostic stages, which show the Japanese patients backchannelling as the doctors give their extended explanations.

This section has given an overview of selected features of the Japanese data and established a basis on which to explore individual consultations in more detail. The remainder of this chapter examines the standard structure of the Japanese consultations.

4.3 Phases and phase transition markers

I discussed previous models of medical consultations in Chapter 2, referring to Byrne and Long's model and the PRACTICAL model devised by Larsen et al (1997), which is gaining acceptance in current medical communication skills training (e.g. Silverman et al., 2005). Essentially, rather than replace any of their phases, I have added sub phases, in order to get a slightly more subtle understanding of the sequence of phases. I have identified eight main phases divided into fourteen sub-phases (compared to Byrne & Long's six phases or Larsen et al's nine phases), presenting my categories alongside theirs to see the correspondences (Table 4.5, §4.4). My analysis draws on Swales' work on genre. Swales identifies the study of linguistic genres as being associated with goal directed communicative events that have schematic structures, but disassociated from the study of register or style (Swales 1990: 42). He gives five defining characteristics:

(i) A genre is a class of communicative events;

(ii) Exemplars of a genre share the same set of communicative purposes;

(iii) Exemplars of genres vary in their prototypicality;

(iv) The rationale behind a genre establishes constraints on allowable contributions in terms of their content, positioning and form;

(v) A discourse community's nomenclature for genres is an important source of insight (i.e. its members have greater expertise about the terminology of the genre than non-members).

(Swales 1990: 45-58)

Doctor-patient consultations accord well with these characteristics. They are clearly communicative events, which include not only the discourse itself, but also 'the role of that discourse and the environment of its production and reception' (ibid: 45). In other words the structure or 'rules' of a medical consultation have become established through the mores of the society in which it is set. All consultations also have a common set of communicative purposes. The patient is seeking help for a medical problem he cannot solve by him/herself, and the two participants work (talk) together to address this problem. The consultation begins and ends in a predictable way, going through a series of standard events (phases) that are understood and expected by both parties. However, regarding (iii), while each new consultation varies according to the appearance or non-appearance of the genre's identifiable phases, the length of each of the phases that do exist, the sequence of the phases (including whether the same phase is interrupted by another phase, thus appearing more than once), the registers employed, and so on, ultimately all of them conform in obvious ways to an ideal (prototypical) form. Furthermore, the genre of medical consultations is clearly affected by (iv), indeed Swales actually cites consultations an example of how a genre is constrained; in this case, by the SOAP structure[22] that doctors have been trained to employ, even though the patient may be unaware that the doctor is imposing this structure on their interaction (ibid: 53-4). Finally, regarding (v), doctors are experts and patients accept the doctor's superior understanding of the conventions of the consultation and allow themselves to be led by them. Having established that medical consultations accord with Swales's definition of a genre, I now examine the discourse structure of the Japanese data I collected to identify the regular phases of this set of encounters.

I examined fourteen consultations, chosen as a sample to represent a variety of all aspects of the data: type of doctor (JD or SD), age and gender of patient, consultation length and whether or not the patient was a referral. I did not include consultations where the patient was accompanied by a third person (11 consultations out of 72), because I regarded these as unprototypical (prototypical = one doctor and one patient, with no nurse or any other third

[22] Subjective (the patient's presentation of his/her illness); Objective (results & evident symptoms); Analysis (of the evidence to lead to diagnosis); Prescription (treatment plan).

party). The sample of fourteen was comprised of five SD consultations and nine JD consultations. I focused more on the JD consultations because on initial analysis of all the consultations it was clear that they were more completist than the senior doctors. In other words, these young doctors adhered to a more 'ideal' consultation structure, and were more methodical in following the structure they had been taught during training. The fact that the SDs had received patient notes from the JD consultation meant that they did not need the patient to present his/her condition or to take a history, focusing instead on the physical examination, diagnosis and treatment. I therefore found the JD consultations more helpful in establishing the early phases of the consultation, which is why there are more JD consultations than SD consultations in my sample of 14. Even though the genre analysis was based on this sub-corpus, during my explanation of the phases (§4.5) I also include sequences from the whole corpus as illustrations.

There were 3 different SDs (all males), and 4 different JDs (3 males, 1 female) and thirteen different patients (6 females and 7 males – one male patient appeared twice, once with a junior doctor and once with a senior doctor). The age range was 20 to 71 years old (male = 30, 38, 53, 56, 61, 65, 71; female = 20, 42, 46, 50, 52, 62). The sample of 14 varied according to length (6'50"~26'02"; mean = 19'36" (corpus mean = 17'54")). Also, 57% (8) of the 14 consultations were referrals, compared to 46% of referrals in the corpus as a whole. Using this subcorpus I aimed to establish the following:

- how phases could be identified
- whether there were any phases or sub-phases not included by Byrne and Long (1976) or Larsen et al (1997);
- which phases were obligatory and whether there was a predictable sequence
- whether there were any typical language features related to particular phases (especially in the doctors' questioning);
- how the conversation moved from phase to another (phase transition devices).

I begin by identifying phase transition markers – points in the consultation where an utterance or sequence of utterances marks the end of one phase and the beginning of the next (c.f. §2.2.3). A central aim of this thesis is to investigate the co-construction of patient-centredness by doctor and patient. By examining how the participants work together to shift phases my aim is to gain an insight into the power asymmetry that enables the doctor to adopt a given consultation style. In §4.2.1 I identify and analyse the nature of each phase.

4.3.1 Phase transition markers in the Japanese consultations

In the Japanese consultations, it was usually possible to identify clear transition markers between each phase. Here is a sequence from #48, which shifts from phase 4c to 4b

then to phase 8:

1	D: petto wa kawarete↑	*D: have you bought a pet*
2	P: inai desu	*P: I haven't got one*
3	D: **ato wa desu ne** (.) go kazoku de (.) ketsuen kankei ni aru go kazoku de (.) okkina byouki sareta toka (.) [...] arimasen ka (.) go ryoushin toka (.) go kyoudai toka	*D: **next right** (.) your (honorific) famile (.) your family that is related by blood (.) have they had any big illness or (.9 […] have they had (.) your honourable parents or (.) your honourable siblings and so on*
4	P: chichioya [...] wa chotto are desu ne (.) daichou gan de (.) wakakushite sanka getsu kurai de (.) nakunattan desu kedo [...]	*P: my father […] just that thing you know (.) of colon cancer (.) at a young age about three months ago (.) he passed away actually […]*
5	D: o ikutsu deshita	*D: how old was he*
6	P: nana juu sai dattan desu kedo mo (.) itami mo naku	*P: he was seventy years old actually (.) there was no pain*
7-20	⇩ ⇩	⇩ ⇩
21	D: de (.) imouto san ka (.) otouto san (.)	*D: and (.) a younger sister or (.) a younger brother (.)*
22	P: imouto ga imasu	*P: I have a younger sister*
23	D: hai imouto san wa nantomo nai ?	*D: yes as for your younger sister there's nothing up with her*
24	P: hai	*P: yes*
25	(12.0)	*(12.0)*
26	D: **shitara desu ne** (.) ni kai no shinsatsu arimasu node (.)	*D: **in that case** (.) since you have a consultation on the second floor (.)*

(#48 P = F42; D=A1M)

We can see the transition markers in line 3 (ato wa desu ne – *next/now*) and line 26 (shitara desu ne – *in that case*), and in the latter case, there is a preceding 12-second silence, emphasising the topic shift. In this way, I was able to note where phase shifts

Table 4.2: Transition markers used by doctors in 14 consultations

Transition marker	Type	Meaning	Tokens
- (sou) (wa) desu ne:	**Closure**	*That's right / isn't that right* (), often after '*ee tou*')	31
(.) wakarimashita	**Closure**	*I see/I understand/OK*	13
sou desu ka	**Closure**	*Is that so*	10
hai (.)	**Closure**	*Yes (I understand what you have said*	4
ee (.)	**Closure**	*Yes / I understand*	4
… desu ke do:	**Closure**	*but'/ 'however'*	3
nochi	**Closure**	*etc. / and so on*	2
naruhodo	**Closure**	*Indeed/is that so?*	2
Long pause			10
(.) ee to: or un to:	**Opener**	*Umm, and / umm and*	31
(.) ato: (wa)	**Opener**	*And / in addition ('wa'* = topic marker*)*	22
(.) sou shitara (.) (.) sou suru to sou shimashitara	**Opener**	*then / so / well* (Usually used in combination with other markers)	18
(sore) ja (.)	**Opener**	*Then /so / well* (**Opening**)	17
(sore) de (.)	**Opener**	*Therefore* (Sometimes used by P to change topic or insert question	14
(.) chotto	**Opener**	*a little'* but IF = *'Just'* or *'really' 'I don't know really.'*	11
(.) ano:	**Opener**	*that',* but IF is *'um'* or *'how shall I put it?'*	6
(.) ima	**Opener**	*now'*	3
ichiou	**Opener**	*Largely / roughly*	2
nanka	**Opener**	*something'* or '*something like'*	2
kekkyoku	**Opener**	*After all*	1
mata	**Opener**	*Also / and then*	1
dewa	**Opener**	*Well*	1
(.) sate to	**Opener**	*Well / now / then*	1

Optional features in brackets (); IF = illocutionary force

occurred, and what form the transitions took, including specific utterances and non-verbal information, such as pauses.

Table 4.2 presents all the doctor transition markers I discovered in the sample consultations I examined. There are two types of phase transition markers: those that signal the end of a phase (closures) and those signalling the beginning of another phase (openers). These two types often work together, as can be seen in the following example at the end of #11:

1	D: toku ni go byouki toka	*D: especially (*honorific*) illnesses ?and so on*
2	P: nai desu ne	*P: none right*
3	D: wakarimashita (.) wakarimashita (.) sore dewa desu ne: ano shinsatsu no aida made mata sakihodo no tokoro de o machi itadakemasu ka	*D: I see (.) I see (.) and ri:ght umm until it's time for the consultation can you (would you be so kind as to) wait in the place you waited before?*
4	P: a: wakari [mashita]	*P: oh: I under[stand]*
5	D: [oyobi shimasu node]	*D: [we'll call you (when the time comes)]*

(#11 P=M32; D=A2M)

In this example two instances of wakarimashita (closure) can be seen in very close proximity, but they bring about very different outcomes: the doctor uses it as an end of phase signal, while the patient uses it to confirm he understands. The clues in the text are that the doctor follows wakarimashita by a pause and then sore dewa (opener) while the patient uses the extended *a:* to signal understanding before wakarimashita, which the doctor overlaps and terminates the conversation. Next, here is an example of a doctor using sore ja to mark a topic shift, from the closing phase of #5:

1	D: o kaeri ni natte kekkou de=	*D: (.) please feel free to leave =*
2	P: =hai=	*P: = yes =*
3	D: =su ne (.) jikai wa kyuu gatsu nijuuroku nichi	*D: = right (.) the next time (topic) is september sixteenth*
4	P: hai.	*P: yes*
5	D: ne.	*D: right?*
1	(1.2)	*(1.2)*
2	D: **sore ja** mukatte kudasai (.) (…)	*D: so then please turn round (.) (…)*
3	(0.9)	*(0.9)*
4	D: kiiroi sen desu.	*D: it's the yellow line*
5	P: hai.	*P: yes*
6	D: ne.	*D: right*
7	P: hai [arigatou gozaimasu]	*P: yes [thank you very much]*
8	D: [o daiji ni douzou] hai (.) doumo	*D: [please take care of yourself] yes (.) thanks*

(#5 P=F74; D=B5M)

In general it is the doctor who initiates the ending of a conversation, but in this case from #63, unusually, it is the patient who initiates:

1	P: aa sou desu ka	*P: oh is that so*
2	D: ee	*D: yes*
3	P: hai wakarimashita (.) ja kyou wa kore de owari desu ne	*P: yes I see (.) so today (topic) with that we're finished right?*
4	D: ee ja (.) kangofu san no toko ikimashou ka	*D: yes so (.) do you want to go to the nurses' place*

5	P: hai	*P: OK*
6	D: setsumei shite kuremasu no de	*D: as they'll explain what to do*

(#63 P=64M; D=B4M)

In this sequence we see how the two types of markers work together to define a phase transition: there is a closure (wakarimashita), followed by a short pause, then an opener.

In some consultations the expressions used by a particular doctor to move from one topic to another within a phase may be different from the phase transition markers used by that doctor in the same conversation. For example in #2 the social history-taking phase is very long and the doctor explores a variety of topics concerning the patient's living environment, using ato wa desu ne, ato desu ne, dewa desu ne then ato wa to separate the topics. However he uses hai wakarimashita when closing this phase (in fact he closes this phase twice, both times using wakarimashita, as there is a break in the middle where the doctor asks the patient to go out and wait in the waiting room. During this time the recorder is switched off. Then the patient comes back to the room and the doctor resumes the phase, but on a fresh topic). There are also long pauses followed by e.g. ato, which do not signal phase closure, but which indicate that the doctor is writing notes, while the patient waits. (These pauses may not be regarded as transition relevance places (TRPs), as the doctor has turn rights here).

Finally, there are also points where the doctor makes a clear phase closure, but the patient either ignores this or misses it and proceeds to add information about a previous question, For example in this sequence from #3 the patient overrides a doctor's wakarimashita (used as an end of phase signal) to keep the turn and continue with the his own agenda:

1	D: [nai desu ka] aruiwa doubutsu toka desu ne (.) sou iu mono ni chikazuite (.) tatoeba gojitaku de petto katte [rashatte]	*D: [you don't have any?] possibly some animal or other right (.) (if) that kind of thing came nearby (.) for example maybe a pet you [bought]*
2	P: [uum un] ano (.) petto kattemasen kedo (.) sono shu no are wa [nai shi]	*P: [umm ah] well (.) I haven't bought (any) pets actually (.) that kind of thing those (topic) [there aren't any and]*
3	D: [nai desu] ne (.) ee (.) wakarimashita.	*D: [aren't any] right (.) yes (.) I see*
4	P: zensoku toka kafunshou toka sou iu no wa arimasen.	*P: asthma hay fever and so on I don't have anything like that*
5	D: hai.	*D: yes*
6	P: sore kara kako (.) ano (.) iro iro (.) ano: (.) uum (.) ha o nuku toki nomasu i toka ne?	*P: and in the past (.) well (.) all sorts of (.) we:ll (.) umm (.) when I was given medicine to have a tooth pulled and so on right?*
7	D: ee.	*D: yeah*

(#3 P=M65; D=A5M)

4.4 The two types of consultations

In this section, to begin my discussion of phases I introduce two of the consultations from the Japanese data: one JD consultation (#4) and one SD consultation (#29). I give an overview of each consultation, and present an 'episode map', showing distinct phases of the consultation that begin and end with phase transition markers that I have identified in my analysis of the recording and the transcript. I carried out the same process of identifying episodes with another 12 consultations to form the total sample of fourteen, so my presentation of #4 and #29 illustrates the procedure followed with the others. As I collected all the identifiable episodes from the 14 consultations I categorised them into phases, using Byrne and Long's model as my guide, adding phases and sub phases when I felt a more precise distinction was useful. In this way I proceed from specific examples to general statements about all the consultations. In §4.5 I present a summary of the phases I identified. I selected these two consultations because, combined, they contain all the phases revealed in the analysis described in §4.5, and are therefore close to the prototypical or 'standard' consultation and are a good representation of all 72 consultations as a whole. Nevertheless, like all the other consultations they display unique features that show the construction of the relationship between the two participants during the course of the interaction.

4.4.1 Consultation #4 - characters & complaint; purpose of this consultation

This consultation shows the typical structure of all the preliminary (JD) consultations in the Japanese data. It contains all the main history-taking phases (presenting the illness; previous illnesses; illnesses in the family; lifestyle; work history/environment), and it has clear greetings and closing phases. (The transcription of the complete consultation is in Appendix 10).

Consultation 4: Summary of Features

Doctor:	A5 (M 20s)	Patient:	4 (F 21)	Third Person?	No
Date:	10/9/01	Transcriber:	MS	Length:	6' 50" *(12'51")*
Presenting symptoms: fever, swollen tonsils, cough				Referral?	Yes
Words	992 *(1735)*	D = 57% *(48.3%)*		P = 43% *(50.6%)*	
D:P Words	1.34 *(1.0)*				
Turns	173 *(230)*	D = 49% *(50%)*		P = 51% *(49%)*	
Word/Turn (wds)	5.33 *(7.7)*	D = 6.60 *(7.2)*		P = 4.87 *(8.1)*	
Word/Sec	2.42 *(2.3)*	Sec/Turn: 2.4 *(3.5)*			
Timed Pauses	*(0.4 - 1.0) = 30*	*(1.1 - 3.0) = 23*		*(3.1 -) = 9*	
Micro pauses (.)	10	Overlaps: 22 *(20.7)*		Turns/Overlaps: 7.77 *(17.3)*	

JD Average in brackets ()

At 21 years old the female patient in #4 is the youngest in the Japanese data; the doctor is JD A1, who is in his mid-twenties and appears in a total of 7 recordings. In common with 42% of patients, she is a referral, in her case from the neurology department of this

hospital. Her presenting symptoms, which began three weeks ago, are swollen tonsils, a high fever and coughing, which is a persistent feature of the conversation. The number of turns taken by each participant is about equal, but the conversation is slightly more dominated by the doctor as regards words spoken.

The overall turn length is shorter than average, the speed of delivery (word/sec) is slightly higher than average, and the turn rate per second is lower than average, all of which would suggest more rapid exchanges. In the JD consultations the longest periods of silences are usually accompanied by writing sounds, as the doctor makes notes about what the patient has said. Many of the overlaps are backchannels[23] or confirmations of information given (D=6, P=7), but there are 3 examples of an overlap used to interrupt and redirect the conversation, and two examples of the patient pre-empting a TRP to add more information.

Table 4.3: Moves and transition markers in Consultation 4

Time	Phase – description	Transition Marker
0'2.8" – 0'8.2"	**Preamble by Doctor about the function of this consultation.**	**D chotto (*just/um*)**
0'8.2" – 13'00"	**Greetings.**	**(0.5)** **P (cough cough)** **D hajimemashite (*how do you do*)**
0'15.5" – 0'28"	Doctor recaps information on the referral letter.	D ee to desu ne (0.5)ichiou shinkeika no sensei kara otegami itadaite desu ne (*um well (0.5) briefly I received a letter from the neurology doctor*)
0'28" – 2'39"	History of present illness	***Unclear*** *Possible 2 part transition marker*
2'41" – 3'04"	Past History	(2.0) D jibika toka ne sou iu tokoro wo jushin toka (*a consultation at the otolaryngologist or somewhere like that,*)
3'09" – 3'16"	Doctor summarises the problem	(4.0) D sousuru to yappari ima ichiban komatte iru no wa ma netsu ga sagaranai to iu koto desu ne (draws a line on paper heavily) ma binetsu ga tsuzuiteiru to iu koto to seki ga tomaranai (*In that case evidently now the biggest problem is, well the fever won't go down so to speak (draws line heavily) well the slight fever is continuing so to speak and the coughing won't stop*)
3'18" – 3'36"	P disagrees with Doctor's summary.	(1.3) P netsu ga detetemo darusa toka tte nakute tada netsu kan dake: na no (*I said I have neither a fever nor do I feel lethargic, but just the feeling of warmth*)
3'43" – 4'18.5"	Past History.	(7.0) (Writing) D mae ni ookina byouki toka ne sareta

[23] The Linguistic Data Consortium explains how a backchannel should sometimes be considered as a separate turn Linguistic Data Consortium (2003). Introduction to Metada. Sentence level SU: Backchannel, Linguistic Data Consortium. **2006:** Instructions for annotators of spoken discourse transcriptions - preparing texts for a corpus., that being the case, a backchannel could therefore occur in overlap.

		koto arimasu (*before now have you ever had a serious illness?)*
4'20" – 5'06"	Social History.	(1.3) D o sake toka ne tabako toka wa dou desu ka (*As for alcohol right or tobacco etc. how about them?)*
5'09.5" – 5'39"	P begins an account of her allergy to a previous medicine when hospitalized.	(3.5) P °ato ee to kono mae hokudai ni nyuuin shita toki mo° (*and um before, also when I was hospitalised in Hokudai*)
5'40" – 5'46.5"	Doctor recaps previous information.	(1.0) P °°ookee desu°° (2.0) (*OK*) P <sniffs> D nanka kaze to iu ka so iu no ga (*how can I say, a cold, something like that is*)
5'46.6" – 5'52"	P returns to her account of when she was hospitalized.	P ano nyuuin shita [toki no] (*um that time when I was hospitalised*) D [ee] (*yeah*) P ano kiroku toka dewa wakaranai desu ka (*that written record and actually I don't know*)
5'52" – 5'58.5"	Doctor asserts control.	D chotto ne <KOCCHI NI WA NE (*just a minute AS FOR HERE*)
5'59.5" – 6'08.5"	Past history.	(1.0) D ato zensoku toka desu ne (*and asthma and so on*)
6'11.5" – 6'37"	Family history.	(3.0) D ato go kazoku (*and your family*)
6'44" – 6'47"	Closing.	(2.0) <sound of writing> D wakarimashita (*I see*) (6.0) <sound of writing> D u:n sore ja kekkou desu yo (*uum right then that's all*)

Table 4.3 is a summary of distinct episodes I detected in Consultation #4. This summary and the summary of consultation #29 (Table 4.4.) serve to introduce the categories as they appeared in the two complete recordings, and they pre-empt the presentation and discussion of the phase categories I develop in §4.4.

Table 4.3 shows the timeline in seconds (left column), corresponding to the time counter on the digital audio file of the consultation, which allows us to see how much time is spent on each phase. In the right hand column, a short section of the transcript is inserted containing the transition marker that was identified (underlined), marking the start of the phase. These are sometimes utterances, sometimes pauses, and sometimes a combination of both. Where a phase transition was detected, but the actual marker was uncertain, this was labelled 'unclear'.

The conversation starts with a preamble by the doctor, explaining the purpose of this consultation (i.e. an interview to find out more details about the patient and her complaint before she has any physical tests or has a more detailed consultation with the SD). This is quite common across the JD conversations as a whole, and in this phase, the doctor sometimes also mentions the recorder, and reminds the patient that it can be switched off any time (e.g. #39, #40). What is unusual in Consultation #4 is that this preamble comes before the actual greeting itself, and the self-introduction (doctor's name and department). After this

the doctor recaps the information on the referral letter, which leads them into the next phase, the history of the presenting illness The transition marker between these phases is unclear, but it is possibly a 2 part transition marker: at 0'22.6" the doctor uses '*ato'* (2.0), which could be a prompt for the patient to speak or to complete his summary of the referral letter. In the end the doctor takes the turn.

At 0'28" the doctor goes straight into the question with no verbal marker (but it might be assumed that some non-verbal marker was given). After this they enter the history-taking phase, beginning with questions about the patient's presenting illness, then moving on to discuss her previous medical history and her social history (lifestyle, and environment). During the progression through the patient's history, there is a discussion about the patient's allergy to previous medication. Here the doctor prepares her for the possibility that she may not receive any medicine today because she can not remember (and did not bring) the name of the medicine that caused the adverse reaction. After this the conversation reverts to history-taking and the doctor recaps the previous information. The patient is clearly dissatisfied with the outcome of the discussion about the medication, and she returns to topic at 5'46" asking if the doctor can check her hospital records to find out what the medicine was that caused the allergy. This attempt to influence the doctor is quickly stopped by the doctor, and he interrupts her to assert his control, coming in fast to explain he does not have the records. After this excitement, the patient makes no more attempts to pursue her agenda, answering the doctor's final string of questions about her past medical history and her family's medical history before the consultation comes to a close at 6'47".

The transition markers I have highlighted above indicate who has power or during each phase of the consultation (see ten Have's asymmetry of power in Table 2.2). In other words, a participant may start or end a topic or a phase only if he/she has speaking rights at that point of the interaction. On the basis of ten Have's schema, for most of the consultation we would expect D to have power, but we would expect P to have speaking rights during P's presentation of the problem, and during the history-taking phase when D has to wait for P's answer before proceeding. In fact, looking at Table 4.3 I show three points where P moves the conversation on: (i) by adding information unprompted – P begins an account of her allergy to a previous medicine when hospitalised (5'09.5"); (ii) by returning to a previous topic – P returns to her account of when she was hospitalised (5'46.6"); (iii) by making a dispreferred response – P disagrees with D's summary (3'18").

In all three cases the patient initiated transitions come during the history-taking phase, during which ten Have predicted the asymmetry would be in favour of the patient. In the third case, the dispreferred response is an indication of P's frustration with the doctor's

misunderstanding, so she asserts herself, using the power asymmetry she has during this phase and indicates some irritation with D after his show of authority in the previous turn (3'09" – 3'16"). In both the doctor's turn (summing up) and P's following turn there is a long pause indicating the TRP, and allowing the turn to pass to the other participant. More evidence of the shifting power dynamics in this consultation can be seen in the episode at the start of this thesis (§1.1).

4.4.2 Consultation # 29- characters & complaint; purpose of this consultation

This consultation shows the typical structure of all the follow up (SD) consultations in the Japanese data (the transcription of the complete consultation is in Appendix 11). I chose this consultation because the phases are clearly defined, and they include all the diagnostic phases (Table 4.5).

Consultation 29: Summary of Features

Doctor: B1 (m 40s)	Patient: 17 (f 62)	Third Person?	No
Date: 13/9/2001	Transcriber: MS	Length:	21'16" *(13'21")*
Presenting symptoms: Abnormal shadow on lung X-ray		Referral?:	Yes
Words	2551 *(1477)*	D = 80% *(74.7%)*	P = 20% *(24.9%)*
D:P Words	3.89 *(3.98)*		
Turns	452 *(185)*	D = 53.3% *(52.4%)*	P = 46.7% *(47%)*
Word/Turn	5.64 *(8.35)*	D = 8.42 *(11.84)*	P = 2.47 *(4.24)*
Word/Sec	2.00 *(1.89)*	Sec/Turn = 2.8 *(4.88)*	
Timed pauses	*(0.4 - 1.0) = 67*	*(1.1 - 3.0) = 34*	*(over 3.0) = 24*
Micro pauses (.)	229	Overlaps = 74 *(22)*	Turn/Overlap = 6.11 *(16.8)*

SD Average is in brackets ()

The patient (P17) is a 62 year old woman, and the doctor is B1, a male in his forties; he appears in a total of 16 recordings. Through his utterances and his frequent light laughter he appears genial, relaxed and in control, giving a lot of information and explaining the results of tests patiently and clearly, ticking off the negative/positive results. In common with 42% of all the patients in my recordings, P17 is a referral. In her case, a previous X-ray has shown up a shadow on her lung, which the referring doctor wants to have checked out by the university hospital. The overall turn length is significantly shorter than the SD average, the turn rate per second is much faster than the SD average, and what is more, as I mentioned in §4.1, during 38% of this consultation there was no verbal interaction. All this might suggest that the exchanges were rather rapid, as in JD consultation 4. However, the overall speed of delivery, while slightly above the SD average, is actually below the overall average (2.1) and well below the JD average (2.3). Also, as in the majority of the SD conversations, the doctor dominates the interaction, uttering 80% of all words spoken, and he also has slightly more turns than the patient. Many of the overlaps are backchannelling, mainly by the patient as she

listens to the doctor's explanation of the X-ray picture and about the other tests that the patient should have and why. There are also 8 examples of overlaps at TRPs either pre-empting a question, asking a question or adding information.

Table 4.4 summarises the phases in consultation #29 according to the format in Table 4.5.

Table 4.4: Moves and transition markers in Consultation 29

Time	Phase – Description	Transition Marker
=======	**(No Greeting)**	==========
00:02.400	Confirming the state of things so far	D e: to (.) sakihodo yoshin (.) ano (*uum the previous preliminary consultation um*)
00:16.800	Doctor Checks information about P's condition (Q&A) (Many leading questions)	(1.9) <banging and knocking> D de (.) anata jishin wa ano toki chottou kagaimashita (*so as for you yourself at that time*)
02:31.700	Physical examination	D (0.5) un: (0.7) D ja chotto shinsatsu itashimasu (*right so lets examine you*)
08:06.400	Explaining the X-ray	(53) <sound of writing and snapping> D hai (.) suwatte (*OK sit down*)
09:24.400	Some bad news (possibility of pneumonia)	P a (.) hai (*yes*) D kore wa iin desu kedomo (.)(*this is alright but …*)
12:02.688	Explaining importance of CT scan results	D de [su yo] (*right*) P [°ah°] D dakara (.)(*Therefore*)
12:50.000	Appointment discussion	(1.3) D sore de (0.4) ano:::: (2.0) moshi mo (*So uuum if …*)
13:14.688	Stomach camera discussion	(8.0) <slow tapping at computer keyboard> D °ne° (1.6) ikamera tte uketa koto: (.)(*yes the endoscopy when you had it …*)
16:59.500	Blood test	(41.0) <door opens; door closes; silence; door opens; door closes> D: ato (.) kyou chotto (*and today, just …*)
17:55.400	Instructions for the test	(41.0) <many noises – writing, etc> D ichiou gouzen juuji ikou desu ne (*briefly from 10 a.m. right …*)
20:04.224	Receiving the CT scan result	(89.0) <rustling;keyboard;etc.> D soshitara a. ano: (.) ko. (.)(*Then uh uum …*)
20:13.600	Instructions for blood test	(1.4) D ketsueki kensa o (0.5) nikai (0.4) (*the blood test second floor…*)
20:38.464	Patient's question about results	P [hai wakarimashita] (*yes I understand*) D e (.)(*yes*) P de (.) ashita no kensa shitara (*so when I have the test tomorrow …*)
20:52.312	Patient confirms understanding	D o hanashi suru (.) [koto ni narimasu ne] (*we need to talk …*) P [ja ketsueki ukete] (*so blood is taken …*) D e: (*yes*)
20:59.200	Closing sequence-doctor checks appointment	D [kekkou desu] (*That's it*) P [wakarimashita] (*I see*) D (.) de (.) ashita ichiji kurai (.) (*so tomorrow at about one o'clock …*)

Greeting

There is no greeting in this consultation, since the recorder had obviously not been switched on at the start of the consultation (this happened in 9 out of 16 recordings with Doctor B1). The conversation begins as follows:

Consultation #29 – Start

1	D: e: to (.) sakihodo yoshin (.) ano (.) owatta ato desu ne (.)	*D: u:m so (.) the last pre-medical interview (.) um (.) after it finished right(.)*
2	P: hai.	*P: yes*
3	D: mune ni kage ga arimasu node (.)	*D: as there was a shadow on your chest (.)*
4	P: hai.	*P: yes*
5	D: ano: sugu chotto (.) shii chii no hou (.) ano itte moraimashita kara (.) [de]	*D: um: directly well (.) to the CT (.) um as you went there for us (.) [so]*
6	P: [hai]	*P: [yes]*
7	D: nochihodo (.) kono shii chii no setsumei itashimasu.	*D: now (.) I'll explain this CT to you*
8	P: hai.	*P: yes*
9	(1.9) <some banging and knocking>	*(1.9) <some banging and knocking>*

Explaining importance of CT scan results.

The doctor mentions which illnesses they will be able to rule out with the aid of the CT scan: diabetes, lung abscesses and lung cancer.

Possibility of illness

In the following sequence we see how the doctor explains some bad news to the patient. The doctor makes a preparatory speech, pausing before the delivery of the verdict (bad news), and lowers his voice to utter 'aru to'. Also, after this there is a pause (0.5) after which the doctor speeds up to quickly add more information.

1	D: n no youna mono (.) yappari hai (ya) no naka ni: (0.9) kuuki (.) ga arubeki tokoro ni: (.) nanika (.) ano tokoro no wa (0.9) °aru to° (.)	*D: l like that kind of thing (.) you see in the lung (0.9) air (.) (is) in the right pla:ce (.) something (.) (in) that place (0.9) °if there is° (.)*
2	D: sore wa (1.0) haien de areba (0.5) >hakkekkyuu nado ooku fukunda mizu desu shi< (.)	*D: that (1.0) if it is pneumonia (0.5) >leucopenia or the like that contains a lot of water and< (.)*
3	P: e:	*P: yeah:*
4	D: arui wa ano: dekimono mitaina mono demo (.) ano kore wa desu ne (.) de (.) kore wa (.) ano hikakuteki	*D: or even umm: some kind of swelling (growth) (.) um this (is) well (.) um (.) this (is) (.) um relatively*

(10:28.8 – 10:27.7)

In the following example, "hai" is used to aid the passage of information (almost like "over" in a military style walkie-talkie conversation – "I've finished, now over to you".

1	D: (0.5) uu: °<ashita chotto yatte mitai [na↑ to]>°	*D: (0.5) oh: °<I'd like to have a quick look tomorrow [OK↑ in]*
2	P: [ah hai.]	*P: [oh yes.]*
3	D: iu fuu ni omoun desu ne	*D: that way I think*
4	P: nanji nan deshou	*P: What time would that be? (call for clarification)*
5	D: gogo kara nan desu	*D: from the afternoon*
6	P: gogo kara (.) hai.	*P: from the afternoon (.) yes (echo - repeats information)*

7	D: gogo kara desu ne (.) e	*D: from the afternoon that's right (.) yes (*confirms information*)*
8	(3.0) <rustling sounds>	
9	D: gogo no (.) ichiji: han desu yo (.)	*D: in the afternoon (.) half past one (.) (*D repeats and adds more detail*)*
10	P: ichiji han [desu]	*P: half past one (*P repeats added details*).*
11	D: [hai]=	*D: yes=*
12	P: = hai	*P =yes*
13	(0.8)	

In the following sequence we can see the first question the patient has asked since the doctor has indicated that there may be some kind of problem (the white shadow). She is clearly paying attention to the doctor because he has wrong with her. The doctor's response is that this is a possibility, but that here they have only a limited emergency service:

1	(6.3)	*(6.3)*
2	P: kekkaku toka ja nain desu [ka]	*P: it isn't tuberculosis or something like that is it?*
	D: [e.] (.) sono kanousei mo touzen ari [masu ne]	*D: um: (.) naturally there is that possibility too.*
3	P: [°sou desu ka°]	*P: oh I see*
4	D: e (0.5) kekkaku no kanousei mo (.) ano: hitei dekinai to °omoimasu° (.) e: (0.9) tada koko ↑dake ni hijou ni genkyoku shitemasu kedomo [ne]	*D: yes (0.5) a possibility of tuberculosis too (.) um: I can't rule this out I think (.) yes: (0.9) but here (we) have only a limited emergency service (you know)*
5	P: [ah]	*P: ah.*
6	(1.3)	*(1.3)*
7	D: sore de (0.4) ano:: (2.0) moshi mo yoroshikereba desu ne: =	*D: and (0.4) um:: (2.0) if you don't mind you know:=*
8	P: = hai.	*P: =yes*
9	(2.0)	*(2.0)*
10	D: >ashita mo mata koremasu ka<	*D: would you also be able to come again tomorrow?*
11	P: <ashita (.) nannyou bi deshitakke>	*P: what day is it again tomorrow*
12	D: >kin you [bi desu ne]<	*D: it's Friday isn't it*
13	P: [kin youbi ne] (.) e:: ashita: (.) wa: daijoubu to omoimasu.	*P: Friday right(.) um:: tomorro:w (.) (would be:) okay I think*

Closing Sequence

The closing sequence of this consultation can be divided into four parts: the patient confirms she understands the doctor's instructions; the doctor checks the date and time of their next appointment; the doctor confirms that he will hold on to the X-ray; the patient utters final parting formula:

1	P: [ja (.) ketsueki ukete]	*P: well (.) have a blood <test>*
2	D: ee.	*D: yes*
3	P: kochira ni konakutemo (.)	*P: I don't need to come (back) here*
4	D: ee (.) konomama kono ato (.) [kaikei shite]	*D: that's right (.) in this way after here (.) [pay the bill]*
5	P: [kaikei shite yoroshiin desu ne]	*P: [I can pay the bill now right]*
6	D: [kekkou desu]	*D: [that's all]*
7	P: [wakarimashita.]	*P: [I understand]*
8	D: de (.) ashita ichiji kurai (.)	*D: and (.) tomorrow at one o'clock (.)*
9	P: ichiji (.) hai.	*P: one o'clock (.) yes*
10	D: ichiji zengo ni (.) dai ichi naika no [sairai no hou ni]	*D: at one o'clock in the afternoon (.) first department of internal medicine [for your*

		next visit]
11	P: [hai wakarimashita]	*P: [yes I understand]*
12	D: ne.	*D: right.*
13	P: hai (.) hai.	*P: yes (.) yes*
14	D: e (.) kore shashin toka (.) chotto zenbu [okarishite okimasu kara]	*D: yes (.) here the X-ray and so on (.) just all of it [if you would leave that with (me)]*
15	P: [hai (.) hai] wakarimashita_doumo arigatou [gozaimasu]	*P: [yes (.) yes] I understand. thank you [very much]*
16	D: [hai (.) hai]	*D: [yes (.) yes]*

Unusually, it is the patient who begins the closing sequence with ja – the patient initiated the closing in only four other consultations out of 72. Also, it is rare for the patient to initiate an insertion sequence (i.e. checking she does not need to return there today) after the closing phase has begun – it happens in only twelve per cent of consultations as a whole. The doctor is quick to respond to the patient's checking information, confirming in overlap, repeating the patient's summary of information almost verbatim. The patient's wakarimashita (line 7) signals to the doctor that he can move on to close the consultation completely. The doctor's checking of information (lines 8-14) is quite typical – this happens in 70 per cent of the data as a whole and 70 per cent of all SD consultations. However, since he does this after the patient's wakarimashita (i.e. after the closing phase has begun) it might be regarded as an insertion sequence, as it would be possible for the doctor simply to end the consultation in his next turn. As such, it is relatively uncommon, as I noted doctor initiated insertion sequences in only 15 closing phases (JD=4; SD=11). It is possible the patient's own insertion sequence has prompted the doctor to make absolutely clear that other important information has been clearly understood.

The fact that these two P initiated transitions occur in the closing sequence suggests that in this phase the power asymmetry has either shifted to P or that it no longer exists, so P now feels he has equal speaking rights with D. All the other transitions in this consultation are initiated by D, which is to be expected in the SD consultations, which are largely concerned with explanations by the doctor and only a limited amount of history taking.

4.5 Categorising the phases

Having identified a series of distinct episodes in #4 and #29, I now broaden my discussion to consider how these relate to and in fact represent 'phases' in the rest of the sample of fourteen consultations from my corpus. I define a phase as a conversational episode bounded by transition markers at start and end, which is characterized by a consistent interactional function or theme running that is distinct from the episodes immediately bounding it. Table 4.5 presents the eight phase categories I established.

Given the nature of the JD consultations – they were preliminary interviews

concerned with history taking – they could never include phases IV, V or VI. On the other hand, it was possible that the SD consultations could include all the phases, although I expected them not to have detailed history-taking phases (II and III). I also expected the structure of the JD consultations to be influenced by the history-taking outline and procedural advice I was given by the chair of the department (the main complaint, the present illness, previous illnesses, family history, lifestyle, work history and environment – see Appendix 2),

Table 4.5: Summary of Phases in 14 Japanese Consultations

Phase	Phase Description	Byrne & Long *	Larsen et al**
1	**Greetings and relating to the patient**	I	2
2	**Reason for attendance**	II	3
	a) Checking written information	-	4
	b) Presenting the complaint: the patient's narrative	II	3
3	**History of presenting illness**	III	5
	Checking & clarifying P's information	IIIa.	4
4	**Previous medical history**	III	5
	a) Taking a past history	IIIb.	5
	b) Taking a family history	IIIc.	5
	c) Taking a social history	IIId.	5
	d) Review of the body systems	IIIe.	5
5	**Physical examination**	III	5
6	**Diagnosis**	IV	6
	a) Consideration of the patient's condition	IV	6
	b) Discussion, clarification of results, terminology, procedure.	IV.	6/7
7	**Detailed treatment and further investigation**	V	6
8	**Closing the consultation**	VII.	9
	a) Closing courtesy	VII	9
	b) Instructions for next stage	-	8
	c) Insertion sequences	-	8

*Cf. §2.1.3 of this thesis **(Larsen et al 1997: 296)

although none of the JDs had either these outlines or any other kind of checklist during the actual consultation itself. In most cases the JDs kept very closely to this format, and it was easy to identify each of the stages as the consultation proceeded. My interest was not in differences in the clinical content of each phase, such as between the sub-phases of the history taking phase, but I needed to establish a 'map' of the consultations so that when I analysed specific episodes I could contextualise them by identifying in which phase they occurred.

In my analysis I wanted to examine the discourse during each stage to see if it had any distinct discourse features, and to see how the doctors moved between the stages:

whether is was a straightforward progression (through the outline that the doctor was invoking), or whether one of the participants shifted the topic back to previous information. In particular I was interested to see who managed to shift the topic, and how. The normal power dynamic means that D moves the conversation on, but as seen in Consultation #4 above there were instances when P, in order to refocus D on a previously mentioned concern, shifted to a previous topic. Therefore, it was important to establish that there were indeed discourse phases in the consultation and to determine whether each phase had a different power dynamic, as predicted by ten Have. In the remainder of this chapter I give initial descriptions of all the phases I detected, as a basis on which to examine them further for power asymmetry and patient-centredness in subsequent chapters (Chapter 5 and part of Chapter 6 examine the history-taking phase in SD and JD consultations, while Chapter 6 examines explanations by the doctor in the diagnostic phases). Also, I wanted to determine whether the Japanese consultations had the same phases as those established through research of consultation data in other languages, or whether any other phases emerged, not previously noted.

The two main differences between Byrne and Long and my categorisation are the inclusion of more sub-phases, and my decision to divide the history taking into two separate phases (3 and 4). On the other hand, most of my categories have a correspondence with Larsen et al, but the phase sequence is different and there is some recursion of their categories in my model. I feel that some of these differences are due to the fact that their model is based on clinical stages, whereas I have created the categories influenced by the discourse patterns evident at particular phases. I explain my categorisation, and the features of each phase below, but before that I want to mention 'social talk' ('non-problem-focused casual talk'), which Ohtaki et al (2004) included in their model, placed after the closing phase. However, it is not clear how social talk fits into their model, or whether it actually counts as consultation talk or not. My own data has very few examples of any social talk either after business was concluded or at any other time, so I contacted Ohtaki about this. She explained:

> social talk in our Japanese data was mainly concerned with the patients' family members and job in history-taking or physical examination phases. One of the reasons may be that most of the cases were of chronic diseases and so the relationship between doctors and patients was closer than of acute ones; in fact, they casually talked about their daily life quite spontaneously (Ohtaki 2004).

In all of my consultations none of the participants had met each other previously, so the interactions were focused entirely on the patient's complaint, so I did not include social talk as a phase in my analysis.

Table 4.6 is a summary of the phase sequences and the number of turns in each phase

of the fourteen consultations I examined, using the above phase categories. The variety of phase possibilities they exhibit emphasises how an institutional framework acts as a general umbrella under which interactions take place rather than being a recipe that must be followed to qualify for membership. Accordingly, the order of progression through the phases is negotiated turn by turn (Swales' point (iii) above). The proportion of time given to each phase is different in each consultation. For example, #49 has a very long and detailed Phase 4a (160 turns out of a total of 260 turns in the whole consultation) – whereas in #18 Phase 4a is only 4 turns long. In both these consultations the doctor is the same (A1), so the variation does not seem to be influenced by any over-riding preference on the doctor's part.

Table 4.6: Phase sequences in fourteen consultations

Consult (Doct)	Phase Sequence (turns in each phase)	All Turns
2 (A5)	1(15) ⇨ 2a(32) ⇨ 3(38) ⇨ 4c(130+) ⇨ 8a(7) BREAK 4c(40) ⇨ 4a(34) ⇨ 4b(65) ⇨ 8b(13) ⇨ 8a(2)	**487**
3 (A5)	1(2) ⇨ 2a(9) ⇨ 2b(130) ⇨ 3(45+) ⇨ 4a(45) ⇨ 5(25) ⇨ 4c(16) ⇨ 4b(120+) ⇨ 4c(10) ⇨ 8b(30)	**460**
4 (A5)	1(3) ⇨ 2a(8) ⇨ 3(35) ⇨ 4a(12) ⇨ 3(6) ⇨ 4a(20) ⇨ 4c(8) ⇨ 4c(32) ⇨ 4b(15) ⇨ 8a(5)	**153**
18 (A1)	1(1) ⇨ 2a(140+) ⇨ 3(45+) ⇨ 4a(4) ⇨ 4c(12) ⇨ 3(20) ⇨ 4b(20) ⇨ 8b(6)	**234**
35 (A5)	1(2) ⇨ 2a(9) ⇨ 3(200+) ⇨ 4a(23) ⇨ 4c(16) ⇨ 4b(77) ⇨ 3b(8) ⇨ 4c(26) ⇨ 8b(11)	**365**
40 (A3)	1(7) ⇨ 2a(17) ⇨ 3(55+) ⇨ 4b(28) ⇨ 4a(55+) ⇨ 4c(9) ⇨ 4c(14) ⇨ 4c(8) ⇨ 4b(40+) ⇨ 4d(28) ⇨ 4c(25) ⇨ 8b(18)	**333**
48 (A1)	1(4) ⇨ 2a(50) ⇨ 3(80) ⇨ 4a(60+) ⇨ 4b(10) ⇨ 4c(10) ⇨ 4b(21) ⇨ 8b(4)	**243**
49 (A1)	1(4) ⇨ 2a(12) ⇨ 3(44) ⇨ 4a(120+) ⇨ 4c(12) ⇨ 4a(47) ⇨ 4b(14) ⇨ 8a(6)	**238**
71 (A6)	2b(55+) ⇨ 3(90) ⇨ 4a(42) ⇨ 4c(20) ⇨ 4c(12) ⇨ 4a(20) ⇨ 4b(40) ⇨ 8b(20) ⇨ 8a(2)	**320**
8 (B5)	1(3) ⇨ 3(22) ⇨ 5(15) ⇨ 6a(36) ⇨ 8b(15) ⇨ 7(70) ⇨ 8c(2) ⇨ 8b(1)	**177**
29 (B1)	2a(8) ⇨ 3(60) ⇨ 5(52) ⇨ 6a(150+) ⇨ 8b(170) ⇨ 8c(20) ⇨ 8a(8)	**457**
46 (B4)	2b(60) ⇨ 7(55) ⇨ 6b(98) ⇨ 5(20) ⇨ 7(16) ⇨ 8b(2) ⇨ 8a(1)	**253**
53 (B1)	1(4) ⇨ 5(40) ⇨ 4b(18) ⇨ 4c(7) ⇨ 6a(30) ⇨ 7(35) ⇨ 7(20) ⇨ 8c(4) ⇨ 7(28) ⇨ 8b(28) ⇨ 8c(25) ⇨ 8a(9)	**303**
64 (B4)	1(1) ⇨ 3(40) ⇨ 6a(6) ⇨ 8b(25) ⇨ 5(4) ⇨ 6a(48) ⇨ 3(24) ⇨ 8b(40) ⇨ 8c(9) ⇨ 8b(20) ⇨ 8c(20) ⇨ 8a(1)	**248**

Consultations #51, #25, #28 and #38 are unusual in that the patient sees only a senior doctor. In #51 the doctor goes through the whole consultation pattern by himself, and thus it is unique in the data as a whole. Also, this is the oldest patient in the recordings – that could be the reason for the senior doctor taking charge – or it could be just that it's at the end of the morning, and the junior doctors have already finished. #25 is the only case where an SD carries out only the history-taking interview, while #28 is the follow up consultation involving this same patient and same doctor after the patient has returned from having a blood test. In order to see how the phases compare across the fourteen sample consultations,

in Table 4.6, I present a summary of the phases and the phase lengths (by turn), which I refer to in my discussion that follows. It can be seen how phases recur and how phase length varies according to the consultation. Also apparent is the difference in the function and development of the consultations between SD and JD doctors as two distinct groups.

4.5.1 Phase 1 Greetings and relating to the patient

Introductions set the tone of the consultation. In particular, they often indicate how patient-centred the consultation is going to be. Schegloff, in his 1968 study of telephone openings introduced the notion of the *summons-answer* (SA) sequence, explaining how all conversations are systematic and start with some kind of attention-getting device (a summons) which is responded to by another party. A summons can be mechanical (e.g. a telephone ring), a term of address (e.g. "John?" "Dr.", "Waiter"), a courtesy phrase (e.g. "Excuse me"), or a physical device (e.g. a tap on the shoulder, a wave of the hand) (Schegloff 1968: 1080). He summarises his paper as follows:

> SA sequences establish and align the roles of speaker and hearer, providing a summoner with the evidence of the availability or unavailability of a hearer, and a prospective hearer with notice of a prospective speaker. The sequence constitutes a coordinated entry into the activity, allowing each party occasion to demonstrate his coordination with the other; a coordination that may then be sustained by the parties demonstrating continued speakership or hearership (Schegloff 1968: 1080).

However, systematic is not the same as ritualised; the setting that Schegloff examines – telephone calls – might lead us to think of conversational openings as being ritualized, but according to Nofsinger this a mistake because firstly, the core sequences (the standard verbal or non-verbal features that we expect to find in a particular conversation genre) that may be truncated or pre-empted by actions that belong to the next sequence, and secondly, in the case of telephone conversations openings are subtly marked to focus on a particular element or display a certain alignment (e.g. the caller is returning a previous call) (Nofsinger 1991:139-140).

Garafanga & Britten (2005) show that openings in British general practice consultations are orderly; in new case consultations begin with an open question such as 'What can I do for you?', and return visits open with 'How are you today?'. The authors conclude that this orderliness is due to 'the context-boundedness of the particular order' (ibid: 88). Three institutional features account for the orderliness of openings in this setting: (i) the GP surgery is the first port of entry into the care system and the patient's reason for attending will be one out of many hundreds of possibilities, so the opening can only offer a general readiness to help; (ii) continuity of care in the system means that the follow up consultation will be a continuation of a previous one, therefore this consultation will open with 'How are

you?'; (iii) GPs get to know their patients over many years, and the quality of the relationship affects the nature of the medical care. Because of this, doctors strategically position themselves to the patient, either by distancing themselves or by claiming solidarity. The use of 'non-standard openings' such as 'Fire away' are a means of claiming solidarity (ibid: 88-9).

Walter et al (2005) carried out a small-scale research (recording and transcribing 17 first time consultations) in order to establish a framework by which to teach trainee doctors how to open an interview. Doctors are observed to go through the following five steps to 'create a context for active listening that is less prone to interruption':

(i) calls the patient to the consultation;
(ii) greets the patient
(iii) introduces him/herself
(iv) makes transition to clinical talk
(v) frames the consultation ('informally and with humour', using referral letter, case notes, computer records or prior knowledge of the patient)

How well do the Japanese consultations accord with this study?

4.5.1.1 Relating to the patient

In the opening sequences of the Japanese data we can see how the doctor takes charge; greeting the patient, telling the patient to come in, sit down, where to put his/her coat or bag, mentioning the recorder and so on. Not all the consultations opened with greetings, as I discuss below, and phatic[24] formalities are not confined to the start of consultations; farewells in the form of adjacency pairs are also common in the closing phase (§6.5.2). Nevertheless, in this section I look at some greeting patterns that emerged as typical.

So, certain actions must happen in order to begin a consultation, but as Schegloff predicted the SA sequences are not ritualised, which means that they do not all follow the same formula and may open in a variety of ways. A consultation begins with a knock at the door by the patient (a physical summoning device), to which the doctor responds by telling the patient to come in. The door opens, the patient comes in. The channels are now open, and the next turn becomes available. At this point the doctor may utter a greeting, or the patient may utter a politeness formula (*excuse me*, *sorry to interrupt*, etc.) or initiate an introductory exchange such as ohayou gozaimasu or yoroshiku onegaishimasu, although patient initiated greetings were rare in the data (see Table 4.7). After this, the doctor has the next turn, which, in the JD consultations usually opens up phase 2 (reason for attendance). Table

[24] *Phatic Communion* = 'a type of speech in which ties of union are created by a mere exchange of words.' (Bronislaw Malinovsky in Joseph, J. E. (2004). Language and Identity: National, Ethnic, Religious. Houndmills, Basingstoke, Palgrave MacMillan.)

4.7 shows the range of greetings used by the doctors in all the consultations.

Table 4.7: Greetings by doctors across the consultations

Greeting Doctor (Cons)	<Doc NAME> +				Ohayou gozaimasu*	yoroshiku ** onegaishimasu	
	desu	to iimasu	to moushimasu	unclear		D (I)	P (I)
A1 (7)	3	1	1		5	5 (4)	5 (1)
A2 (7)		3			3	2 (1)	
A3 (3)			3		2	1	2 (1)
A4 (3)				1	1		
A5 (7)			5		2	3 (1)	2
A6 (5)		1				1 (1)	1
A7 (4)		1	3			3 (2)	1
B1 (16)	1			1		3 (2)	1
B2 (2)						1 (1)	1
B3 (2)							
B4 (10)					1		
B5 (6)						1	
B6 (1)							1
Total (72)	**4**	**6**	**12**	**2**		**20 (12)**	**14 (2)**

(Cons) = Number of consultations involving this doctor (I) = initiates an adjacency pair
*In only 3 cases (#1(A5), #17(A1), #40(A3)) was ohayougozaimasu echoed by patient. In 4 cases (#48 (A1), #49 (A1), #60 (A2), #35 (A5)) patients uttered ohayougozaimasu or konnichiwa which was not echoed by the doctor),
**In 12 out of 23 consultations Yoroshiku onegaishimasu is said after <Doc NAME> +

Greetings are typically 2 or 3 turn exchanges, but as can be seen from Table 4.8 This phase is sometimes skipped or not recorded in the SD consultations (this was the case in #29 and #46). In the data as a whole, 36 consultations open with a greeting; 28 in the JD consultations and 8 in the SD consultations.

Table 4.8: Greetings in the consultations

Junior Doctor (JD)	A1	A2	A3	A4	A5	A6	A7	Total
Consultations with greeting (All consultations)	(7)	(7)	(3)	(3)	(7)	(5)	(4)	8 (36)

Senior Doctor (SD)	B1	B2	B3	B4	B5	B6		Total
Consultations with greeting (All consultations)	4 (16)	1 (2)	0 (2)	1 (10)	1 (6)	1 (1)		8 (37)

18 out of 38 of the greetings initiated by the doctor were not followed by a verbal response from the patient (JD = 15, SD =3). While in some cases there may have been a non-verbal response instead, it seems in some cases that the doctor does not appear to present a TRP, as in the following example from #44:

1	D: sensei ni desu ne (.) mite morau mae ni desu ne (.) watashi no hou de karukushi	*D: the doctor right (.) before you are seen by him right (.) I'd like you to let me hear*

	ohanashi no hou kikasete kudasai	*your story simply please.*
2	P: hai	*P: yes*
3	D: dai ichi naika no <NAME> to iimasu yoroshiku onegaishimasu de (.) kyou wa ee to: uun to fujinka (.) sanfujinka no sensei no hou kara o tegami moratterun desu kere [domo]	*D: I am NAME of the first department of internal medicine pleased to meet you so (.) today um er: um er gynaeco (.) I received a letter from the gynaecology doctor [actually]*
4	P: [hai]	*P: [yes]*

(#44 P = F35; D=A7F)

In line 3 after the self-introduction and greeting the doctor immediately inserts 'de', thereby blocking a possible TRP and thereby keeping the floor. The following micro pause is not a TRP and the doctor continues her turn, turning to the patient's reason for coming. The other interesting point about this example is that it can be seen that greetings do not always come at the start of the consultation; in this case the doctor explains the purpose of the meeting first, as if it were some kind of preamble. This JD always explained to the patients that her consultation was a preliminary question and answer session and diagnosis and treatment would happen in the follow up consultation with the senior doctor. Other JDs, in particular A5, who conducts consultation #4, do not explain this, and in that particular case it may possibly have raised the expectations of the patient regarding getting immediate treatment. There is a clear change in the cooperativeness of the patient in both #4, and in #2 (P= F52), both conducted by doctor A5, as the consultation goes on. In both cases, as the doctor goes through his long list of standard history-taking questions it becomes apparent to the patients that they will get no treatment out of this meeting, and it comes to be seen as a necessary hospital procedure that has to be endured until they can see the 'real' doctor later on. So their enthusiasm drains away and they start to give less attention to the questions they are being asked. On the other hand, by explaining the function of the first consultation right from the start Dr. A7 may avoid this kind of attrition by the patient. She is also a much more efficient manager of the consultation, as #44 (referral – shadow on liver X-ray) lasts only just over two minutes, since she quickly ascertains the patient's condition, and swiftly moves through the family history. This contrasts very starkly with Dr. A5 in #4 lasting 6'50" and #2 (new case – chronic coughing), lasting 19'22". I examine #2 again in Chapter 5 §5.5.2, and #4 in Chapter 7, §7.3.2.

4.5.1.2 Recordings with no greetings

While there is an overwhelming tendency for the JDs to include a greeting at the start of their consultations, in only 8 consultations out of 36 did the SD give a greeting. This can be explained in many cases by the fact that the doctor clearly did not turn the tape on until he or she had confirmed the patient's consent to be recorded, by which time they may have already exchanged greetings (this appears to be the case in nine out of sixteen of B1's recordings; three out of ten of B4 recordings; two out of six of B5's recordings; two out of

seven of A2's recordings and two out of five of A6's recordings). Also, in some of the conversations, the doctor says his/her name, but it is not possible to hear what form is used because that part of the recording has been cut according to the requirements of the ethics committee (§3.3). For example:

1	D: hai douzo (.) hai (.) haite kudasai (.) haite kudasai (1.0) yappari tan ga tsukaeru kanji nan desu ne	*D: yes by all means (.) yes please come in (.) please come in (1.0) so it feels like phlegm is getting stuck isn't that right*
2	P: ee	*P: yes*
3	D: hai (.) a (.) soshite >watashi ano: (… NAME …)<	*D: right (.) ah (.) and >I'm um (…NAME…)<*
4	<1.5>	*<1.5>*
5	D: ee to (.) ato zee zee (.) hi hi tte oto wa shinai desu ne (.)	*D: um and (.) then a wheezing (.) breathless you say noise there is none right (.)*
6	P: suru	*P: there is*
7	D: sore mo shimasu ka↑ (.) a ha (1.5) ee (.) yoru ga nemurenai to (.) nicchuu wa hikakuteki raku desu ka	*D: there's also that too? (.) aa haa (1.5) right (.) and in the evening you can't sleep (.) in the daytime comparatively easy is it?*

(#8 P=M56; D=B5M)

In this consultation, the SD launches straight into a summary of the presenting condition, then seems to realise the need to introduce himself, which he does with an insertion sequence uttered very quickly (line 3) to which the patient gives no verbal response. Instead there is a pause and the doctor moves on to the next phase of the consultation – checking information on the form (line 5).

However, gaps in the recording do not account for all the cases where there are no greetings. There are 12 consultations (JD=1, SD=11) where the recorder has clearly been switched on before the patient enters the room, but the doctor does not give a greeting. Here is an example from #16 where the doctor comes directly to the point of the meeting:

1	D: a (.) suwari kudasai	*D: a (.) please take a seat*
2	P: hai	*P: yes*
3	D: a ii su ne [kon naka ni]	*D: ah (.) t's alright [in here]*
4	P: [hai] hai	*P: [yes] yes*
5	D: (...) arimasun de irete kudasai	*D: (…) there is (.) please put it inside*
6	P: hai	*P: yes*
7	D: (1.8) hai ee to (2.0) ee to tai gan kigou … no (.)	*D: (1.8) yes and um (2.0) and um (… tai cancer …) from*
8	P: hai	*P: yes*
9	D: hou kara desu ne	*D: there right*
10	P: hai	*P: yes*
11	D: de (.) poriipu wo totta hou ga ii to	*D: at (.) you'd better take out a polyp and*

(#16 P=M75; D=B3M)

There is no overt greeting, but even in this situation, it is evident that the consultation still has an SA sequence – the door opening is the summons to the doctor, prompting him to invite the patient to sit down, then in lines 3 and 5 he directs the patient where to put his belongings while he is settling himself down.

4.5.1.3 Setting the tone – developing patient-centredness

Whatever happens next, the institutional roles have now been confirmed by the

opening sequence. The doctor has taken charge, and both parties have established that from now the doctor has more rights in determining the subsequent course of the consultation and it is the doctor who will ultimately decide when the consultation comes to an end. In recognising the doctor as the expert and that this is the doctor's home territory the patient has been shifted into a position of dependence or submissiveness, the power relationship has been established as asymmetrical, and therefore the default turn-taking rights have passed to the doctor. Moreover, it is the doctor who has more power to mitigate the asymmetry and decide how patient-centred the consultation will be. This opening sequence is the first indication of how things are likely to proceed in this regard. Consider the opening sequence from #40 involving a female JD, A3 (this doctor is very consistent, opening her other two consultations, #32 & #39, in an almost identical way):

1	D: hai (1.3) douzo o hairi kudasai (1.0) ohayou gozaimasu	*D: yes (1.3) please (.) come in (1.0) good morning*
2	P: ohayou gozaimasu	*P: good morning*
3	D: douzo o kake kudasai douzo osuwari ni natte kudasai	*D: please seat yourself (.) please sit down* **<u><polite></u>**
	(3.1)	*(3.1)*
	D: ano setsumei [wa	*D: um (.) an explana [tion*
4	P: [a (.) hai]	*P: [oh (.) yes]*
5	D: atta to] omoun desu kedo (.) kou yatte rokuon sasete itadaitemasu node (.) moshi ano tochuu de iyada to omottara itsu demo (.) kore kirimasu node (.) osshiette kudasai	*D: has] already been given I think (.) since today you have allowed us to record (.) if um in the middle you think it is disagreeable at any time (.) I'll turn it off here (.) please tell me*
6	P: a <laughing>(.) ke (.) kekkou desu (.)	*P: oh <laughing> (.) tha (.) that's alright*
7	D: hai sore ja shinsatsu no mae ni kore made no keika toka ni tsuite ohanashi wo kikasete kudasai (.) <NAME> to moushimasu	*D: right well then before the consultation I want to listen to your account of the course of events until now (.) I'm called <NAME>*
8	P: hai	*P: yes*
9	D: kyou irashita no wa (.) ee to (.) kochira no wo (…) miru to(.) nanka sengetsu matsu kara chotto seki ga deru	*D: today as for coming (.) um (.) looking at (…) here (.) since the end of last month just you've had a cough*

(#40 P=F46; D=A3F)

In this sequence the JD (A3) explains the purpose and nature of the interview and her own role in it, she is reaffirming the patient's rights as an active participant in the exchange of information; the patient will not merely be probed for answers, on the contrary, the patient's comfort and consent are of value and even necessary to the success of the interview. The doctor reinforces this further by informing her patients about the recording process, and that the recorder can be switched off at any time. This contrasts with #1 when, after the initial greetings, another JD, A5, launches straight into phase 2, omitting to mention his role and the limited scope of the interview, he gives a different signal to the patient. Thus, establishing openness during this opening phase makes it easier to keep to a patient-centred approach in the subsequent phases.

Consider also how the participants use the phrase yoroshiku onegaishimasu. This is a respectful greeting which means something like 'I beg your indulgence' or 'let's have a good relationship', or 'Thank you for your co-operation'. It is used more as a signal to start a relationship with someone or a group of people, so it cannot be interpreted simply as a conversation opener. In fact the phrase is also used at the end of the consultation where it would signal that the relationship that has just begun in this meeting would be continuing at the next appointment. The following example is the start of consultation #2:

1	P: suimasen	*P: excuse me*
2	D: a (.) ohayou [gozaimasu]	*D: ah (.) good [morning]*
3	P: [yoroshiku] onegaishimasu_ hajime mashite <cough>	*P: [yoroshiku onegaishimasu] how do you do <cough>*
4	D: <name> [san]	*D: Ms <name>*
5	P: [Hai]	*P: [yes]*
6	D: dewa suwatte kudasai	*D: well please sit down*
7	P: <cough>	*P: <cough>*
8	D: watashi (.) dai ichi naika no <name> to moushimasu. yoroshiku [onegaishimasu]	*D: I (.) am called <name> of the first department of internal medicine yoroshiku [onegaishimasu]*
9	P: [yoroshiku onegai] shimasu	*P: [yoroshiku onegai] shimasu*
10	D: saki ni chotto desu ne (.) [ano]	*D: first, just well then (.) [um]*

(#2 P=F52; D=A5M)

In the above sequence, the patient uses yoroshiku onegaishimasu (y.o.) twice, once in overlap as a part 2 AP after the doctor's greeting, then again in overlap as a part 2 AP in reply to the doctor's y.o.. Across the data, doctors use y.o. at the start of 19 of the consultations (JD = 13, SD = 5), 8 of these examples are part one APs, provoking a corresponding y.o. from the patient, 4 of these are part two APs replying to the patient's y.o. and 5 of these do not form part of an AP and nor do they appear to offer a TRP; instead the doctor moves on to another topic. The patient uses y.o. in 14 of the consultations, 8 are part two APs in reply to the doctor's y.o., 4 are part one APs provoking y.o. from the doctor. 2 are part two APs in reply to another greeting by the doctor and in #36 it is used in reply to the doctor introducing himself by name.

4.5.2 Phase 2 Reason for attendance

This phase has two aspects: a) checking written information, and b) presenting the complaint: the patient's narrative.

a) Checking written information. Phase 2a appears in all JD consultations in the whole corpus, but not always in the SD consultations (27 out of 37). There are two kinds of written information: comments the patient has written about his/her symptoms on the standard hospital form (all patients), and letters of referral written by the patient's previous doctor (some patients). In many JD consultations the doctor would recap the information on the form after the greetings phase finishes (e.g. #35, where the doctor shifts from Phase 1 to Phase 2 within his second turn of the consultation. In the case of referrals, the JD (usually)

and the SD (occasionally – only in 3 cases was a letter referred to)) clarifies to the patient the information written in letter of referral. Therefore the doctor does not ask the patient's reason for attendance (for example in consultation #49).

It is sometimes difficult to separate this phase clearly from Phase 3a (especially in the JD consultations), as the same process is being carried out – the doctor is putting the patient's thoughts into words that they can both agree on (Larsen et al call this checking the health belief). The grounds for making a distinction between 2a and 3a are partly sequential (the form is always referred to before the patient is asked to present his oral account) and partly instrumental (written versus oral).

In the SD consultations there were three main patterns after Phase 1:

1. D recaps the information given in the JD consultation in one or two confirmatory utterances (often using ne, 'isn't that right?', in sentence end position as a call for confirmation), which then lead into a sequence where the doctor asks for more details about symptoms (24 instances – *Phase 3* below). Thus the recap serves as a way into a Q and A session, with D indicating that P should take the floor. In one case (#9) a cough by the patient is used as a prompt for D to refer to P's presenting information:

D:	chotto suwatte kudasai (.)	*Please sit down*
P:	<coughs>	*<coughs>*
D:	aa sonna kanji desu hikkirinashi ni seki ga derun desu ne.	*Aah, it's like that. A cough that never stops, isn't it.*
P:	<very quietly> seki (.....) desu yo ne	*cough (unclear) that's right.*

2. D recaps the information in the referral letter (3 instances);

3. D explains the results of a medical test (7 instances – *Phase 6* below).

Of the remaining three SD consultations, there were two instances where D asks P to get undressed for a physical examination (#28, #53 – *Phase 5* below), and one instance where there is confusion about P's test results, leading to apologies by the doctor (#55. This sequence is discussed in §7.3).

b) Presenting the complaint: the patient's narrative. Phase 2b is an optional and infrequent phase of the JD consultations (in the sample of 14 it only appears in #3) and an optional feature of the SD consultations (e.g. # 51, where the patient has not seen a JD, and the SD carries out all the diagnostic stages). In the JD consultations this phase is optional because the doctor is able proceed directly from 2a to 3a, after reading and checking the information on the form. 2b is a narrative in which the patient tells the story of his/her symptoms while the doctor listens, backchannelling to encourage continuation (these are often simple echoes of the patient's utterances, and sometimes longer closed questions). The doctor usually writes down some notes (sounds of writing are usually clearly audible on the

recordings). Occasionally, in this phase the doctor asks for clarification about something, but does not open up any new areas. This aspect is what distinguishes it from the subsequent phase, 3a, where the doctor begins asking for new information that the patient did not give in the narrative. In 3a there is a shift away from backchannelling and towards more involved questions and answers. Therefore, even if there is no overt phase transition marker, it is often clear when the patient has finished his/her opening narrative

Ten Have predicts this phase as being asymmetrical in favour of P, and this is the phase where P talks most. For example, in #18, it is difficult to recognise a phase transition marker between 2b and 3a, as the patient's input dominates much of the history-taking. is also interesting that in #18 the patient has the highest percentage of words of all the consultations (75% of total words), and the majority of the consultation is taken up with Phase 2 (150 turns) and Phase 4 (50 turns).

4.5.3 Phase 3 History of the presenting illness

I decided to separate history-taking into two phases, Phase 3 and Phase 4, even though in other models they constitute only one phase: 'III. Verbal or physical examination' (Byrne & Long); '5. Translating from life world to the world of medicine: verbal or physical examination' (Larsen et al). The two history-taking phases take up the majority of the JD consultations. In phase 3 the doctor asks for more details about the patient's illness, checking and clarifying the information as it emerges. During this phase the patient takes up most of the speaking time, while the doctor listens and takes notes, asks open (WH) questions, and sometimes offers similes or examples as closed (yes/no) questions for the patient to confirm or deny (*Does it feel as if you were …?*) (this can be seen in #35 and #49). This is clearly part of the doctor's process of transposing the patient's terminology into a medical framework; the life world experiences have to be clearly determined then reinserted into the world of medicine. Sometimes it is obvious that the doctor is leading the patient to a particular conclusion, thereby deviating from the deductive style. I look at an instance of this in my discussion of doctor's question types in §5.4, and again in §5.5.2 where a JD elicits information about smoking from the patient in #2. In this phase the doctor may also interrupt the patient to ask a clarifying question, and the doctor may repeat (part of) the patient's previous turn exactly, with or without '<u>desu ka'</u>[25] in end position, to be confirmed or denied by the patient. For example this kind of echo question can be seen in #49:

1	D: uun: dore gurai mae kara	*D: uhu: since about how long before*
2	P: yappari <u>hantoshi kurai</u> tatsu no ka na	*P: it must be about half a year has gone by*

[25] "desu ka?" is a question indicator that can be placed at the end of an affirmative, to mean "…, is that right?" It may be omitted, and the repetition would be enough to indicate a question without any extra prosodic features.

	?	*can it be?*
3	D: hantoshi gurai desu [ka]	*D: about half a year is it?*
4	P: [uun]de: ki ni naru you na seki de mo nai desu ne chotto: kanai ga nanka: otousan hen da ne tte iu iwareru to sou ka na tte:	*P: umm the cough was not enough to be worried about just: my wife said to me father that's a bit strange she said I suppose you could say*

(#49 D =A1M; P=M71)

4.5.4 Phase 4 Previous medical history

This phase has four aspects, which I labelled according to the departmental history-taking checklist (Appendix 2): a) Taking a past history; b) Taking a family history; c) taking a social history; d) a review of the body systems.

a) Taking a past history. This phase appeared in all the JD consultations in my sample, but only in #53 of the SD consultations. It is sometimes difficult to determine where Phase 3 ends and Phase 4a begins, as a presenting symptom may have appeared at some time in a previous illness and the doctor may ask about that previous illness before returning to questioning the patient about the present illness. In this case I had to decide whether to map the phases as **3⇨4a⇨3** or just **3⇨3⇨3**, which is the case in #71. The doctor utters negative tag questions about possible previous illnesses to be confirmed or denied by the patient (#49); desu yo ne (*isn't that right*?) after repeating information; or expressions such as tsumaranai koto demo (= '*even trivial things*') when pressing the patient to remember previous illnesses (#35). Finally, this phase often exhibits long narratives by the patient punctuated by backchannelling by the doctor (for example #49).

b) Taking a family history. This is a necessary phase of the JD consultations and a usual phase in the SD consultations (it was only absent from #64). The length of this phase varied considerably, ranging from 14 turns (6%) in #49 to 120 turns (26%) in #3. In this section the doctor asks about serious illnesses in the patient's family, starting with the patient's parents then onto siblings. Usually, the length of this phase reflects how much the doctor decides to explore the patient's information. For example, in #49, in 14 turns, the doctor establishes the patient's parents are deceased and that she has no siblings, then she moves on directly to the closing. However, in some cases longer history-taking phases occur because the doctor is unable to stop the patient from developing his/her story. This can be seen in #3, where the patient (male, 63, oesophagus cancer), dominates the consultation from the start, making it difficult for the JD to direct the conversation. The patient knows a lot about his illness, having been under treatment for the past month, and after the introduction phase and a nine turn phase 2a the consultation moves into a very long patient's narrative (130 turns), and later a very long family history (120 turns). The doctor makes initial efforts to direct the patient but seems overwhelmed by the confidence of the patient, and instead he backchannels and takes

notes[26]. The doctor finally manages to reassert his power on the third page of the transcript.

c) Taking a social history. This phase appeared in all the JD consultations and only one of the SD consultations (#53). It includes two main aspects: *lifestyle (e.g. smoking, alcohol, diet)*; and work history and environmental factors (e.g. *allergies, previous medication),* which emerged separately. In the sample of 14 this phase was usually quite brief (12-40 turns), but in #2 it lasted 170 turns, because the doctor suspected asthma and was pursuing an exhaustive line of questions about possible environmental triggers.

d) Review of the systems This phase appeared in only two consultations in the sample, both of them with JDs. Its purpose is to check the functioning of the body systems. This medical department specialises in respiratory conditions, so the doctor checks for chest pain, breathlessness, noise in respiratory tract, palpitations, cough, bringing up sputum, bloody sputum, fever (see Appendix 2).

4.5.5 Phase 5 Physical examination

This phase occurs in none of the JD consultations in my sample, and in four of the SD consultations. On the recordings it is characterised by short directive utterances given by the doctor, followed by long periods of verbal silence. Without video data this phase reveals only limited information about the discourse.

4.5.6 Phase 6 Diagnosis

In this phase the doctor reviews the tests and the patient's history, and explains and clarifies medical information to the patient (test results, terminology, procedure) in terms the patient can understand. In my recordings this usually involves long explanations by the doctor of test results (#29), explaining anatomical information or pathological information (#46), using impromptu drawings, pointing at X-ray images or graphs or other test results. This phase is the main topic of §6.2, where I look at patient-centeredness in the careful explanations given by the doctor.

Larsen et al (1997) call this 'Interaction: negotiation on what to do' (p298), where the participants reconcile the life world and the world of medicine so that the patient will be able to agree with the doctor's proposed treatment plan (see §6.4 - how participants co-construct a mutual frame of reference). However, when the participants are unable to reconcile their frames of reference they have to negotiate. Pilnick (1998) notes an accepted view that:

> through talk patients preserve the differential status between their own and

[26] The initial transcriber of this consultation commented "this patient talks proudly about his illnesses; the more serious the disease is, the more proudly he talks. He knows very much about his disease but the doctor does not seem to. The patient seems to be teaching the doctor about his disease. It also seemed that the patient was very conscious of the microphone and he was showing off more than usual, which is very common among old Japanese people" The latter point was also made in Ohtaki, S. (2004). Clarification of 'social talk' in Japanese consultations. M. Holst.).

> professional understandings of their complaint in order to prevent an undermining of the their grounds for seeking help (Pilnick 1998: 47).

This suggests that if the patient appears too knowledgeable about their illness in some way they might fear less cooperation from the doctor, so they avoid using medical terminology. However, Pilnick shows that in her data from pharmacist/client encounters customers are using the same terminology as the pharmacist. In my own data there was a notable example of a 65 year old male patient who showed great familiarity with medical terms, as he explained in detail his own and his family's illnesses, almost as if he were teaching the young JD that was interviewing him. I look at this sequence in §5.3.5 in my discussion of leading questions. Phase 6 occurs in none of the JD consultations, but it is a prominent phase of the SD consultations (ranging from 36 turns to 150 turns). However, while in four of these this is a consideration of the patient's condition (phase 6a), in #46 the 98 turns are an explanation by the doctor about the upcoming procedure (endoscopy), which I classify as phase 6b. So 6a and 6b do not appear to be obligatory phases, which accords with Byrne and Long:

> this one is the only phase that may be clearly marked as "optional under all circumstances"… In nearly 30 percent of consultations we have on tape it does not occur at all, and in a further 48 per cent it does not occupy one tenth of the time used in the whole consultation (ibid: 25).

Also, Larsen et al (1997) note that if the problem is simple and the patient is sufficiently familiar with the voice of medicine little time need be spent reconciling the frames of reference.

4.5.7 Phase 7 Detailed treatment & Further investigation

This phase occurs in none of the JD consultations in my sample, and it occurs in three of the five SD consultations. There is often a negotiation of the next appointment, and a discussion or explanation of the planned procedure (e.g. stomach camera examination in #29). It is sometimes difficult to determine where Phase 7 begins, and where Phase 6 ends, since a consideration of the patient's condition may lead to a discussion of choices open to the patient (e.g. in #53 the doctor tries to persuade/suggest to the patient (unsuccessfully) that it might be quicker to get a bed in a private hospital than in the university hospital for tests for his ongoing condition). After the participants have settled on a course of treatment, the doctor might sum up the outcome of the discussion as a treatment plan, or plan of further investigation.

4.5.8 Phase 8 Closing the consultation

Ten Have summarises two early CA studies on conversational openings (Schegloff 1972) and closing sequences (Schegloff and Sacks H 1973). His discussion shows how paired

actions (adjacency pairs) are at the heart of the methodology: 'taking what people are doing and finding out the kind of problem for which this doing might be a solution' (ten Have 1999: 17). The latter study considers turn-by-turn sequences as being organized in an overall conversational structure, which allows the analyst to think in terms of conversational sections, in this case the closing section. Adjacency pairs provide 'an organizational template for the achievement of mutual understanding' (ten Have 1999: 21) – the production of the second part on cue shows that the second speaker has understood (or not) the intent of the first speaker and that he/she is willing to go along with it (or not). Sacks and Schegloff talk about holding off uttering a 'mentionable' (what actually gets talked about in a conversation) until it can be fitted in naturally with another 'conversationalist's' prior utterance. If it cannot be, then there has to be a provision for allowing this mentionable to be placed. This, they suggest, is the function that topic empty utterances such as 'We-ell …', 'So-oo …', 'OK …' serve – they are possible pre-closings, which allow the turn to be passed to another participant who has the option to open up a closing sequence (ten Have 1999: 22).

In the Japanese data, the closing phase of the SD and the JD conversations differ according to their function. In most of the JD conversations, the patient's visit is not yet over, and he/she will have a follow up consultation with the SD (often after some kind of medical test). Consequently, the JD closings tend to include directions of how to get to the place of the physical examination, or instructions to the patient to wait outside until he/she is called. The

SD closings often come after an appointment discussion for a follow up visit, or after the doctor has given instructions and information about some medicine he has prescribed to the patient. Therefore, the JD closings are 'good bye for the time being', while the SD closings are more 'good bye and take care'. It is important to bear these situational differences in mind in comparing the two sets of data. I summarise the expressions used by doctors at the closing phase in Table 4.9 and by patients in Table 4.10.

These consultations had very little social talk at the closing phase. Phase 8 has three aspects a) a closing courtesy, b) instructions for next stage, c) insertion sequences. I made a detailed study of the closing sequences in all 72 consultations, and I present a detailed discussion of that in §6.4. Here, I explain my rationale for making these three sub-phases given. As Larsen et al (1997: 300) point out, this is the moment where the participants ask themselves if all that needs to be said has been said before the patient leaves and the next patient comes in. For this reason, it was natural to see phases 8b and 8c appearing after 8a had begun, so I categorise them as features of the closing phase, even though the contents of these sequences may have much in common with that of previous phases.

Table 4.9: Patterns used by doctor at Closing Phase

Feature	Examples	SD Consults	JD Consults
Signalling understanding	wakarimashita	(Y = 12%)	(Y = 47%)
Pause before understanding phrase	(.) wakarimashita	(Y = 61%)	(Y = 97%)
D explains what will happen next	shinsatsu made (until the consultation)	(Y = 69%)	(Y = 78%)
D instructs P to wait outside	mou sukoshi omachi itadakemasu ka (please wait a little)	(Y = 6%)	(Y = 78%)
D gives P directions		(Y = 36%)	(Y = 14%)
D tells P he/she will be called again		(Y = 8%)	(Y = 42%)
JD Refers to next doctor (SD)		(Y = 0%)	(Y = 22%)
Expression of thanks (for P's cooperation in the consultation)	otsukare sama / yoroshiku onegaishimasu	(Y = 9%)	(Y = 20%)
Expression of thanks (formal)	arigatou gozaimasu / domo	(Y = 10%)	(Y = 9%)
Take care/look after yourself	o daiji ni	(Y = 19%)	(Y = 0%)
Overt termination (D tells P he/she can leave)		(Y = 19%)	(Y = 6%)
D initiates insertion sequence after opening up closing sequence		(Y = 31%)	(Y = 12%)

Table 4.10: Patterns used by Patient at Closing Phase

Feature	Examples	SD Consults	JD Consults
Expression of understanding	wakarimashita	*(Y = 53%)*	*(Y = 31%)*
P Recaps or interprets D's information		*(Y = 12%)*	*(Y = 19%)*
P initiates insertion sequence after opening up closing sequence		*(Y = 19%)*	*(Y = 8%)*
Expression of thanks (formal)	arigatou (gozaimasu)	*(Y = 38%)*	*(Y = 22%)*
Expression of thanks (less formal)	doumo	*(Y = 19%)*	*(Y = 3%)*
P excuses him/herself for bothering the doctor	sumimasen	*(Y = 14%)*	*(Y = 8%)*
P excuses him/herself for bothering the doctor (more formal/formulaic)	shitsureishimasu	*(Y = 0%)*	*(Y = 3%)*
P expresses thanks/ good wishes to D	yoroshiku onegaishimasu	*(Y = 14%)*	*(Y = 17%)*

a) Closing courtesy. I use the term 'closing courtesy' to mean adjacency pairs or triplets uttered to signal the end of the encounter, similar to the greetings sequences at the introduction. Closings are a necessary feature of all consultations, but there are a variety of ways in which they come about. Usually, they are initiated by the doctor, but occasionally (#2) it is the patient who opens up the closing. Some have an overt ending sequence (utterances that mean 'goodbye' or 'thank you'), while in others closing is brought about though a phase transition marker such as wakarimashita (I see) or sore dewa (so then. For example, here is the ending of #4:

1	(2.5) <sound of writing>	
2	D: WAKARIMASHITA	*D: RIGHT*
3	(6.0) <sound of writing> (.) <rustling of paper>	

4	D: u:n sore ja kekkou desu yo	*D: umm: well then, you can go now*
5	P: hai	*P: yes*
6	D: ano mata oyobi shimasu no de ne	*D: er: you'll be called again later*
7	P: ha:i	*P: ye:s*
8	D: hai	*D: yes*
9	<rustling of paper>	

(#4 P=F20; D=A5M)

The JD begins this phase with a 2.5 second pause followed by wakarimashita, which is a usual feature of JD closings (average = 47%). In addition to wakarimashita as an end of phase marker, a number of other phrases emerged as typical in these closing sequences: arigatou, (thank you) o daiji ni (take care), ja (well, then), otsukare sama deshita (thank you for your trouble), yoroshiku onegaishimasu (thank you for your cooperation). In JD consultations, where wakarimashita occurs it is nearly always preceded by a pause (97%). Then the doctor tells the patient that she will be called again (JD average = 42%). Finally the doctor tells the patient directly that she can leave now (kekkou), which is very rare among JD consultations – there is only one other instance of this. Also rare, are some of the JD's omissions: he does not explain what's coming next, compared to 78% of JDs who do and he does not tell the patient to wait outside, compared to 78% of JDs who do. On the other hand, like the majority of JDs, he does not use any parting politeness phrase, such as otsukaresama or yoroshiku onegaishimasu (JD ave = 18%). In response to all this, the patient offers minimal backchannelling, with no parting phrase or politeness (arigatou (gozaimasu), sumimasen or yoroshiku onegaishimasu), which compares to about 40% of patients who do. Neither does the patient use wakarimashita, (31% of JD patients do); she does not recap or interpret the doctor's information (19% of JD Ps do), and there is no patient initiated insertion sequence after the beginning of the closing phase (this occurred in 8% of JD consultations). Overall, it can be said that the patient is very passive and unresponsive during this phase compared to most other patients, while the doctor is very dismissive compared to most other JDs.

b) Instructions for next stage. This phase does not appear in Byrne and Long's model, but in Larsen et al's (1997) model it appears as phase 8 – Agreement check: safety netting – where the doctor checks for mistakes or misunderstandings in the plan they have agreed to, and makes sure the next stage of treatment is set up (p300). To show how important this is, in §7.2.2 I examine a case where the patient has misunderstood the instructions at the end of his JD consultation (#50), missing the test he was supposed to have before the SD consultation (#55), and causing a lot of confusion that the SD has to clear up and apologise for. Given their definition, it may be more properly a separate phase, rather than a part of the closing, but there are good grounds to include it as part of phase 8, as it sometimes occurs after phase 8a has been initiated, and it does not appear until after phases 1-7 have been completed.

Typical features of this stage are negotiating a date for a follow up appointment (SD); negotiation of the place where the patient will be hospitalized (SD); how and where to pick up the prescription (SD), instructions for a medical test (SD & JD); asking the patient to wait in the waiting room until he/she is called again (JD).

c) Insertion sequences. Insertion sequences can occur at any stage of a conversation, but across the Japanese consultations there was a clear pattern of closing specific insertion sequences that emerged once the closing courtesies had begun. So the patient may interrupt to check information, or the doctor may give extra instructions or comment. Patient initiated insertion sequences are an indicator of the mutual participation model: when the patient asks a question it is a vindication of his/her role as a valued participant in the encounter. A positive or encouraging response by the doctor to such a question validates the patient's decision to initiate the insertion sequence, and thereby further promotes patient-centeredness. In the following sequence from the end of #63, the patient opens up an insertion sequence in line 2 to get more information about he proposed medical test he has arranged with the doctor:

1	D: ja (.) mazu wa ashita [kensa shitemite desu ne:]	*D: well (.) first of all tomorrow [we do a test right]*
2	P: [jaa ashita no kensa] cchuu koto wa (.)	*P: well talking of tomorrow's test [you say]*
3	D: ee	*D: yes*
4	P: daichou gan no hou no dake no kensa desu ka	*P: is it a test for colon cancer only?*
5	D: sou desu ne daichou (.) chokuchou kara daichou no oku no hou made kamera de	*D: yes, that's right colon (.) from the rectum the we get up to the opening of the colon with a camera*
6	P: ee	*P: yes*
7	D: ee (.) daichou (.) ma (.) daichou gan kenshin tte iu ka desu [ne]	*D: yes (.) colon (.) well (.) colon cancer examination it's called [right]*
8	P: [ee]	*P: [yes]*
9	D: ma (.) poriipu mo mitsukarimashitara [moshi]	*D: well (.) if we find a polyp [if]*
10	P: [un]	*P: [mm]*
11	D: hitsuyou ga areba (.) ano: maa baai ni yotte wa poriipu [toru]	*D: it is necessary (.) u:m well in that case we take out the polyp*
12	P: [un]	*P: [oh]*
13	D: chiryou mo chotto nyuuin yoyaku toka totte morau kamo shiremasen kedo (.) ee sono ba dewa toranai to omoimasu kedo	*D: for treatment we would have to make an appointment to be admitted to hospital and so on probably but (.) that situation is unlikely I think*
14	P: aa sou desu ka	*P: oh is that so?*
15	D: ee	*D: yes*
16	P: hai wakarimashita (.) ja kyou wa kore de owari desu ne	*P: right I understand (.) well as for today we finish here right*
17	D: ee ja: kangofu san no toko ikimashou ka	*D: yes we:ll let's go to where the nurse is*

(#63 P=M64; D=B4M)

After opening the topic in line 2 the patient's question in line 4 prompts the doctor to give an account of the procedure itself, leading on to an explanation about possible treatment if anything is found. So the patient's question, although needing only a yes or no, is open enough to signal to the doctor that an extended explanation is better to cover a broader range

of worries the patient may have about what exactly will happen, including the possibility of admission for an operation, but the doctor downplays this in 13, in anticipation of a follow up question from the patient. So line 4 is really a prompt for the doctor to elaborate while he (the patient) backchannels. The insertion sequence comes to an end at 14 and 15, after which, unusually, it is the patient brings the consultation to a close uttering the overt closure signal in 16. However, this could be due to his opening up the insertion sequence after the closing has begun, and his utterance is signalling back to this, so the initiative does not shift to the patient at this point.

4.6 Summary

I have established that there were distinct phases in the Japanese consultations by identifying a number of phase transition markers and showing how they appeared in the interactions. I illustrated how these markers appeared and were instrumental in structuring two of the consultations: one junior doctor consultation and one senior doctor consultation. I identified and described eight phases in the Japanese consultations, paying particular attention to the greetings phase and the closing phase. The doctor's institutional role gives him or her to power to close one phase and move on to the next one, and within each phase he/she sets the tone. Evidence of patient-centeredness can be seen in Phase 1, where the relationship is set through the doctor's opening remarks. We saw this in the way that JD A3 opens her consultation in #40 by stating the patient's role as a valued participant in the interaction. The mutual participation model is by the appearance of patient-initiated insertion sequences in the closing phase, where the patient's voice is allowed to emerge and be encouraged through positive responses by the doctor. I shall examine patient initiated insertion sequences further in §6.4.2.

In the next chapter, I examine a powerful way in which the consultation is made more patient-centred by looking at the doctor's questions in the diagnostic phase of the consultations. In that chapter I show how the doctor directs the patient to develop his/her story according to the medical agenda. I explain the types of question used, and carry out a quantitative study of questioning patterns in contrasting the SD and the JD consultations.

5. DOCTOR'S QUESTIONS

5.1 Question choice in medical consultations

Initiations by doctors included statements, imperatives, explanations and questions. While many parts of the consultation are transactional, the doctor also sometimes offers comments, such as reassuring the patient when giving the results of a test – "That shadow is quite normal and nothing to worry about." or when apparently thinking out loud – "Now I wonder if we should see you again next week or not." Imperatives may appear at any time, but they are quite common during the physical examination, – 'Please sit down.' or 'Would you lift up your shirt for me?' They reveal the degree of hedging by the doctor, which is an indicator of the power asymmetry at that moment (discussed in §6.2.5). Explanations are a prominent feature of the diagnostic stages (discussed in §6.4, §6.5 & §6.6) and the degree to which the doctor rephrases or repairs his/her utterances shows sensitivity to the patient – the degree of patient-centredness. The doctor asks questions at any time during the consultation, but they occur most often in the history-taking phases.

In this chapter I investigate how different kinds of questions are used to elicit a specific information at a given point. However, as in any other type of conversation, the response of the interlocutor (i.e. the patient) is not wholly predictable, so the doctor may sometimes get a dispreferred response. Avoidance of such a scenario will affect the doctor's choice of question. Also, a question is the first part of an adjacency pair, and the expected second part is an answer. Yet, doctor's questions are sometimes responded to with a question from the patient, signalling the beginning of an insertion sequence which the doctor will have to deal with. A patient might also just ignore a doctor's question because he/she is anxious about some information that has come up previously in the conversation, so instead of answering he/she initiates a new topic. So, as the doctor goes about the business of getting the information he/she wants to establish a diagnosis he/she tries to direct the course of the consultation through apposite questioning, he/she has to continually deal with deviations and dispreferred responses by the patient.

The doctor's questions reflect and influence how patient-centered the consultation is. If the power relationship were absolutely weighted in favour of the doctor could act like an inquisitor, asking a series of bald interrogatives with no follow-ups. Yet this never happens. The doctor's questions are obviously transactional at heart, firstly because of the hypothetico-deductive method employed (requiring the collection of factual data, especially during the

history taking phase), and secondly due to the time constraints imposed on the consultation. However, there is clearly an interactional element to them, as the doctor needs to maintain a cooperative relationship with the patient. Consider the following sequence (Episode 5.1), which is taken from the history-taking phase of JD consultation #37. The JD's job is to gather sufficient and relevant information to narrow down the possible causes of the patient's complaint, and to assess the need for any medical tests before the patient sees the SD. As we can see, to achieve this end he uses a series of different types of questions at different moments of the consultation.

Episode 5.1 (#37 P=M56; D=A5M)

1	<sound of writing>	*<sound of writing>*
2	D: hai ato desu ne (.) arerugii to ka sou iu mono wa wa nai de[su ka]	*D: yes (.) next right (.) as for as for allergies, etc. that kind of thing you don't have any do you?*
3	P: [nai desu (.)]	*P: [I don't have any (.)]*
4	D: arerugii nai (.) o kusuri to ka (.) sou iu no wa jinmashin to ka	*D: no allergies (.) as for medicines etc. (.) that kind of thing nettle rash etc.*
5	P: nashi	*P: nothing*
6	D: tabemono daijoubu desu ne	*D: foods are okay right?*
7	P: sou desu ne	*P: that's right*
8	D: go jitaku de petto toka desu ne (.) katte rasshaimasu?	*D: in your (honorific) house (.) do you keep any?*
9	P: neko wa kattemasu	*P: I have (keep) a cat*
10	D: neko toku ni sono (.) ma neko san de (.) me ga kayui toka [shoujou wa↑]	*D: the cat especially that (.) well on account of the (honorific[27]) cat (.) do have symptoms such as itchy eyes*
11	P: [(...) nai desu]	*P: [(…) there isn't]*
12	D: ato desu ne (.) (PNAME) san desu ne (.) ato go kazoku to iu ka (.) issho ni sundeiru hou dewa nakute desu ne (.) ma (.) chokkei no chi no tsunagatta kata desu ne	*D: next right (.) Mr. <PNAME> right (.) next talking of your (honorific) family (.) not who you live together with right (.) well (.) your blood relatives right*
13	P: hai	*P: right*
14	D: iden (.) ma (.) dake dewa kaishaku dekinai desu ke domo:	*D: genetic (.) well (.) only, well it can't be interpreted actually:*
15	P: identekina mono de (.) warui mono wa nani mo (.) watashi wa nai to omotte[masu]	*P: genetically based things (.) there is nothing bad (.) I don't have any I think*
16	D: [ee] a (.) sou desu ka (.) chotto kousei (.) kousei oshiete itadaite yoi desu↑	*D: [yes] ah (.) I see (.) just the structure (.) would you be able to explain the structure for me*
17	P: haha to [ma chichi (.)]	*P: my mother and [well father (.)]*
18	D: [otousan to] okaasan ga irasshatte go kyoudai wa↑	*D: [your father and] mother are there, how about (honorific) brothers and sisters?*
19	P: kyoudai ga ne (.) juu nan nin ita kana↑ juuichi nin kana↑	*P: right as for brothers and sisters (.) it's over ten people is it? eleven of them is it?*
20	D: juu ichi nin (.) a: (…)	*D: eleven of them (.) ah (…)*
21	P: onna (.) otoko go nin onna roku nin kana	*P: women (.) five men six women is it?*
22	D: (…) otousan to okaasan ga ite (.) Kyoudai ga ichi. (.) ni (.) san (.) yon	*D: (…) your father and mother are there (.) as for your siblings there are one two three*

[27] It is unusual to use 'san' as a title for an animal, even for someone's pet: 'chan' might be unremarkable as a bid for solidarity. Throughout his consultations this young doctor is idiosyncratic in his use of Japanese honorific forms, tending to overuse them given the institutional setting. We can see this clearly in #2, for example, where his patient is a middle-aged woman. In that conversation, it seems that these small mistakes confuse the expected institutional relationship and irritate the patient.

	(.) go (.) kyuu (.) juu (.) juuichi nin irasshatte (.) chotto ue kara oshiete itadaite yoi desu ka	*four five six seven eight nine ten eleven people (.) just from the oldest would you explain about them for me*
23	P: ee to (.) oshieru tte koto wa?	*P: so um (.) by explain you mean?*
24	D: ee to otoko to onna to	*D; so um males and females*
25	P: otoko (.) onna	*P: males (.) females*
26	D: ee	*D: yes*
27	P: ee to choujo ga onna:	*P: so um the oldest is female:*

Sometimes the doctor uses standard grammatical forms for questions (ka - lines 2, 4, 22), other times he prompt with high pitch on the final syllable without a grammatical marker (lines 16, 18), other times he repeats what the patient has just said as an apparent question prompt (lines 4, 18), and other times he uses more polite forms (line 22). Why does the doctor use a particular question at a particular juncture, and in what way does this variety of question forms contribute to the effectiveness of the consultation?

In this chapter I examine the different kinds of questions used in the diagnostic process, considering how a particular question emerges at a particular point. I also consider if there are any obvious differences in the questioning styles of junior and senior doctors, and see what differences there are in the way that individual doctors questioned different patients. I begin in §5.2 by explaining how I identified utterances in the data as questions according to their prosodic, grammatical and pragmatic features. Identifying questions correctly was important to enable a quantitative analysis of their occurrence across all 72 consultations. Following this background discussion, in §5.3 I identify question types used by the doctors in the Japanese consultations to elicit and clarify the specific information they require. In §5.4 I return to consider Episode 5.1 to show how the doctor directs the patient using these five question types. In §5.5 I make a quantitative analysis of doctor's questions to elicit relevant information from the patient. Finally, §5.6 considers how the doctor's skill in questioning (which question at which point) is a fundamental element in making consultations more patient-centred.

5.2 Defining a question

After the initial stages of the greetings and establishing the reason for coming, the doctor moves from what I shall call *elicitation* to *interrogation*. This is reflected in the style of questions used. Elicitation is displayed in open-ended WH questions, such as '*What seems to be the problem?*' while interrogation uses closed 'yes-no' questions, such as '*Does it hurt when I touch here?'* or *'Is it harder to breathe on cold days?*). In this section I want to explore the questioning patterns across the consultations, and look specifically at some examples of how the doctor uses questions to direct the patient through the diagnostic procedure. First, let us consider the nature of questions in talk-in-interaction in the medical context.

The mutual participation model is the model of choice in modern clinical training (see §2.1.1). In this model, the patient is expected to look up to the doctor, and obey the orders he/she receives for his/her own good (Szasz and Hollander 1956: 587). The doctor can interrogate the patient and expect detailed answers, but the patient is not expected either to ask questions or to expect detailed explanations. West (1993) shows that unlike casual conversations, where the order, size and content of turns are organized on a turn by turn basis, the consultation is a form of pre-structured interview, and it therefore constrains the types of utterances open to each of the participants. West shows that one of these constraints is that patient-initiated questions are unusual (ibid: 128-9).

West (1993) reviews the function of questions and answers within doctor-patient consultations as a prelude to her quantitative study of doctor- versus patient-initiated questions in family practice consultations (ibid: 129-138). Since an answer is the second part of an adjacency pair that has as its first part a question, its absence would be 'noticeable: it would be 'officially absent'. This does not mean that an answer must immediately follow a question in the next turn – it could follow a request for clarification, or a protracted insertion sequence, or it could be observed as an utterance that has a stronger stress, which could be interpreted as an answer by relating it to a previous utterance or non-verbal behaviour, as could be imagined in the following exchange:

```
Barman: (looks suspiciously at the female entering the bar)
Girl:   Don't worry (.) I'm eightTEEN
```

A question is typically forward looking – an utterance expecting an answer, while an answer is retrospective, relating to a preceding question or questioning behaviour. What is more, questions and answers are not reciprocal: an answer is made intelligible by there having been a question, but a question can be recognised without there being a corresponding answer following it. However, not all questions look forward searching for new information, there are other types that West calls 'conditionally relevant question types'. She presents 3 examples of these:

(i) requests for repair, which look backward to a previous utterance, such as in the following imagined exchange:

A: I wish I were in Hawaii now

B: what?

A: oh I'm just I'm fed up with the winter here.

B: oh right yeah (.) I know what you mean.

In this exchange B's `what?` in the second line is in response to A's opening utterance that has an underlying illocutionary force that B needs more information about in order to

comment on it. In other situations a request for repair could occur based on a suspicion - even when there is no utterance by a speaker, his/her non-verbal behaviour hints at something that the listener needs to clarify or explore. For example:

A: what do you think of my new dress?
(2.0)
A: huh?
B: I didn't say anything.

The two-second pause is significant enough to cause A to request an on-record clarification, which B declines to address.

(ii) requests for confirmation of a prior item, which is when one speaker utters something like '*Okay*?' in a tagged position for the next participant to respond with an 'acknowledgement token' (e.g. '*mm::*'). She does not regard these as legitimate 'answers' – they function as opportunities to confirm or disconfirm;

(iii) marks of surprise such as '*Really?*' are more like backchannelling devices and do not function as questions at all, and therefore require no 'answer', but could be responded to with a confirmation or disconfirmation.

5.3 Question types in the Japanese consultations

5.3.1 Identifying questions in the data

There were some difficulties in identifying such forms in the Japanese data. Syntactically, a Japanese interrogative is formed with the particle ka in sentence final position (Shibatani 1990: 257-8, 338). A simple search for ka in my corpus gave a list of 3,574 tokens, many of which are clearly not 'forward looking' questions (as described above). For example, sou desu ka, depending on prosodic features such as speed and stress, or on the immediate discourse context could mean either *"Are you sure about that?"* (a forward looking question), '*really?'* (a backchannel expressing surprise and yielding the next turn) or '*I understand*' (a confirmation that the listener has understood the speaker's information). On the other hand, ka is not the only way of forming a question. Just as in English, rising intonation can transform a declarative into a question. For example, iku is the base form of 'go', so its contextless meaning is 'I go', 'He goes', 'I am going', etc. But in speech, with rising intonation on the second syllable it becomes 'Are you going?' 'Shall we go?' etc. Secondly, spoken Japanese, even more than English, routinely uses ellipsis, dropping both subject and object, thus forcing the hearer to attend carefully to context to interpret the illocutionary force. Japanese also exhibits requests for repair such as e↑, ha↑ or n↑ and the particle ne↑ would be interpreted as a request for confirmation as in the discussion of *'okay?'* above. However, sentence final ne does not always use rising

intonation to indicate a question. Rising intonation on a certain word in mid sentence may serve this function instead, as can be seen in the following example from consultation #65:

D: soko shimete itadakemasu ka (.) kankinou shougai (.) ee to kyo↑nen kara wa detetan desu ne↓	*D: could you shut that for me (.) liver damage (.) um and since last year it appeared is that right*

(#65 P=F34; D=B4M)

Rising intonation indicating a question occurs in mid-sentence on the content word the speaker wishes to stress: kyou↑nen (*was it last year that it appeared?*).

5.3.2 Question types

Questions used by doctors in the JD conversations fall into two basic categories: (i) questions eliciting new information (i.e. information that had not yet been discussed in this consultation), and (ii) questions confirming what the patient has said during the conversation (i.e. when the doctor checks that he/she has understood the information that had already been given by the patient). Certain types of questions tend to occur in certain phases of the consultations more than in others. In this section, I categorise the question types I identified in the data, and I consider where and why they occur in the consultations.

Through an examination of the data I established five subcategories of the two main categories stated above, which I present here.

I Eliciting new information
   a. Probing questions about completely new information, where the doctor moves on to a new topic that has not previously been covered.
   b. Follow ups, probing for more detailed information.

II Calls for confirmation
   a. Summarizing, reiterating or rephrasing information the patient has just given in order to prompt a confirmation from the patient.
   b. Echo questions, repeating the exact word or phrase that the patient has just said in order to prompt a confirmation.
   c. Leading questions, deducing a conclusion from information the patient has given.

Silverman et al have similar categories in their chapter on 'Gathering Information' (Silverman et al 2005: 59-105). The main difference is how questions are distinguished from backchannels: my question categories (above) are mainly dealt with under Silverman et al's discussion of 'facilitative responses'; their taxonomy of question types is has only two categories: open or closed questions. Within my own discussion, I regard backchannelling as a type of facilitative response that is different from a question, as explained in §6.2. In this section I shall explain how I arrived at this categorization through my examination of the

Japanese data.

5.3.3 Type Ia. Probing questions

These questions usually come after a topic change signal, and therefore typically refer to information that has not yet come up in the conversation; they are breaking new ground. In particular, in the latter part of the history-taking the JD asks about the family history, the patient's lifestyle, and previous illnesses, so each of these topics would begin with this kind of question. Here are two sequences both taken from consultation #69:

(i)

(3.0)

D: ato desu ne (.) ano arukooru nomaremasu ka

D: and right (.) um do you drink alcohol?

(ii)

<writes something>

D: ato: ano yuketsu sareta koto tte arimasu ka

D: ne:xt um have you ever had a blood transfusion?

In both these examples there is a topic shift signal, then a slight pause before the question itself. Both are closed questions, demanding a yes or no answer. While the doctor is basing his/her questions on the pre-determined consultation template they have learned in their training, each question could also be regarded as fishing for information, since a yes or no answer is equally likely. These questions are likely to be appear during phases 3 and 4 where the JD is running through a standard series of topics – they cover information that is required for a complete history – at least in this particular university hospital – but many of them will not be especially relevant to the patient's presenting symptoms. It is possible that more experienced doctors in less formal institutional settings (small clinics), and with more time pressure would target history-taking questions to the most relevant topics.

Probing questions do not always bring immediate results, and sometimes the patient needs more prompting to reveal the relevant information. In the following sequence, at the beginning of phase 2a of JD consultation #49, the reason for attendance is unclear to the doctor beyond the fact that the patient has been referred after a previous examination and there is a medical problem:

1	D: ano: shinsatsu no mae ni desu ne: yoshin to iimashite: ohanashi kikasete itadaite desu ne (.) ano: (.) sono ato mou ikkai shinsatsu ni hairu to iu katachi de yarashite itadaitemasu node (.) yoroshiku onegaishimasu	*D: um:: before the examination ri:ght (.) the so-called preliminary examination you tell your story for me you see: after that the process is you have a consultation once again if you would actually(.) Thank you for your cooperation.*
2	(1.2)	*(1.2)*
3	D: sore desu ne konkai nan desu keredomo (0.6) ano: kono tegami toka (.) iroiro	*D: and this time right though (0.6) u:m I've read this letter and (.) various things*

	yondan desu keredomo: ano kenshin de	*howeve:r umm in the medical examination*
4	(2.0)	*(2.0)*
5	P: ee	*P: yeah*
6	D: (.) kenshin de ano: hikkakatta to iu koto de >kochira no hou dewa (.) shoujou dewa:< kou iu no ga atte to iu koto wa (.) toku ni: (...) (.) sou iu no wa nai [desu]	*D: (.) in the medical examination erm this so-called problem that brought you here (.) any symptoms (.) is there anything like this (.) in particular (...) (.) there's nothing like [that?]*
7	P: [nai] desu [ga]	*P: [nothing] actua[lly]*
8	D: [nai] desu	*D:[not]hing?*
9	P: ee (0.5)	*P: yes (0.5)*
10	D: kensa shita hou ga ii tte koto de:	*D: it's best to examine it they said*
11	P: ee	*P: yes*
12	D: ano shiichii toka totte	*D: umm they took a CT scan*
13	P: ee	*P: yes*
14	D: hokudai ga shoukai sarete:	*D: and introduced you to Hokudai*
15	P: ee: sou desu ne	*P: yes: that's right*
16	D: kimashita: to iu koto desu ka	*D: and you came here is that right*
17	P: sou desu ne	*P: that's right*
18	(6.0)	*(6.0)*
19	D: ee: to: soshitara go jibun dewa zenzen shoujou toka wa: arimasu ka ne	*D: um we:ll in that case as for your honourable self have there been absolutely no symptoms and so on at all, then?*
20	P: un: betsu ni (.) sukoshi seki ga ne: ↑	*P: um nothing special (.) a little coughing you know*
21	D: seki ga arimasu↑	*D: you have a cough?*

(#49 P=M71; D=A1M)

In line 3, the doctor refers to the letter, saying he has read this and other information. However, he does not know what the problem is and he needs the patient to tell him. He therefore asks the probing question in line 6, which he sets up with a rapid preface to explain that the problem is still unknown, referring to the condition as hikkakatta to iu koto (*'the so-called problem'*), then inserting: shoujou dewa: kou iu no ga atte to iu koto wa (.) toku ni: (*any symptoms anything like this in particular*) before finally asking the negative question sou iu no wa nai [desu] (*There's nothing like that?*). The patient seems to have anticipated the doctor's question, because he confirms it in overlap (line 7). The patient's response is anticipated in turn by the doctor and he confirms it in overlap in line 8 without the patient needing to complete his utterance. After this the doctor offers a series of Type IIa affirmative questions (see below) (lines 10, 12, 14, 16) that reiterate information he has already presented, to which the patient provides confirming responses with one word utterances The repetition of information attempts to get the patient to realise he needs to give more details. Finally, in 19, after the long pause (4 seconds silence followed by 2 seconds of rustling (possibly writing) the doctor raises the level of importance of this question by saying: dewa zenzen shoujou toka wa: arimasu ka ne (*so you don't have any symptoms at all?*). This finally prompts the patient to reveal new information, and shifts the consultation into a more standard phase 3 – short doctor's questions and long answers by the patient, lasting for the next fifty turns or so.

5.3.4 Type Ib. Follow-ups

The following sequence from #69 shows a doctor using a closed follow-up after a long pause where he is writing notes:

1	D: hai (.) so shitara ato desu ne: ima made natta byouki no koto kikitain desu kedo mo: koujousen no	*D: right (.) in that case next ri:ght I'd like to hear about any illnesses that you've had until now (.) thyroid*
2	P: hai	*P: right*
3	D: °shujutsu°=	*D: °operation° (.)*
4	P: =ato: shouni zensoku kurai desu	*P: also: childhood asthma*
5	D: shouni zensoku↓	*D: childhood asthma↓*
6	P: hai	*P: yes*
7	(8.0) <sound of writing>	*(8.0) <sound of writing>*
8	D: kore zensoku no hou wa genzai dou deshou ka	*D: as for this asthma how is it these days*
9	P: a: zenzen	*P: ah: nothing at all*
10	D: mou zenzen	*D: now nothing at all*
11	P: hai	*P: yes*
12	D: hai	*D: yes*
13	P: shougakkou roku nensei kurai de osama [ta: hai]	*P: when I was in my sixth year of primary school it settled [down (.) yes]*
14	D: [a: sou desu ka]	*D: [ah: is that right]*
15	P: hai	*P: yes*
16	(3.0) <sound of writing>	(3.0) <sound of writing>

(#69 P=M30; D=A6M)

The probing question (type Ia) comes in lines 1 and 3, preceded by a topic shift marker and micro pause. The patient's hai in line 2 separates the two parts of the doctor's example, 'thyroid operation' and serves as an affirmative – '*yes, I've had some previous illness*'. In either interpretation, it seems to be the cause of the doctor softening 'operation' in recognition that the patient has understood him and is ready to respond to the question. Line 4 is the answer itself, latching on to the doctor's fading utterance, and the doctor checks to confirm this information with an echo question (see below) in line 5 that is confirmed with the patient's 'hai' in line 6. Line 8 is the follow up, which is an open question – 'how is it …?', to which the patient answers that there is now no problem. The doctor calls for the patient to confirm that he has understood. The patient confirms in line 11 (hai), which the doctor repeats (line 12) to show he has understood, at which point the patient adds additional information to his initial short reply in line 9. Then the doctor bids to bring this short sequence to a close with a non-probing 'a sou desu ka' in line 14, which is accepted by the patient in line15.

Follow up questions probe for more detailed information about a topic that has already been opened up and prompt the patient to clarify a previous utterance. These questions may be closed if the doctor is offering an example to be helpful (e.g. "*A pain you say. Is it a throbbing pain?*'), but they are usually open-ended WH questions (e.g. '*How many cigarettes do you smoke a day?'*; '*When did your mother die?' 'You mentioned a fuzzy feeling in your eyes. Could you tell me a bit more about that?'*). Follow-ups appear at all stages of

the JD conversations, but they are common in phases 3 and 4. They are common after the doctor has elicited an affirmative from the patient with a probing question. Therefore, more follow-ups would be expected from the JDs than SDs, when the patient is giving information about himself (patient talking; doctor listening)[28].

In another sequence, from #70 (dizziness after coming out of hospital), the doctor tries to control the direction of the history-taking from a patient who is not answering his questions directly.

1	D: [aa (.) memai ga tsuyoku natta]	*D: [ah (.) the dizziness became worse (stronger)]*
2	P: ee	*P: yes*
3	(3)	*(3)*
4	D: ato (.) ano ni san o kikishitai n desu kedo mo	*D: next (.) um I'd like to ask about (your) older sister actually*
5	P: hai	*P: yes*
6	D: ima made ano (.) natta byouki toka tte (.) chotto o kikishitai	*D: until now um (.) illnesses that you've had you say (.) I'd just like to ask <about them>*
7	P: hai	*P: yes*
8	D: ano:	*D: um:*

(#70 P=F77; D=A6M)

This is a complicated history for the patient to explain, and in the early stages of this consultation the patient's account of her symptoms and present condition wanders back and forth. She also wants to show the doctor the data she has got from her previous hospital. The patient needs little prompting from the doctor to develop her story (she is a self-starter,) so the doctor mainly listens and takes notes, but he also tries to keep things in a logical order. In this consultation, the doctor is mainly listening, with a few requests for clarification while takes notes.

5.3.5 Type IIa. Summarizing, reiterating or rephrasing patient's information

Silverman et al include this kind of questioning behaviour in their discussion of facilitating responses under 'paraphrasing', defined as 'restating in your own words the content or feelings behind the patient's message ... it is intended to sharpen rather than just confirm understanding and therefore tends to be more specific than the original message' (Silverman et al 2005: 81). I include them as a questioning category, as they nearly always demand a confirmation from the patient, and therefore they can be seen as the first part of an adjacency pair. They are not just rhetorical monologues, or instances of the doctor thinking out loud for his/her own benefit. Grammatically, checking questions can often be recognised by ne, 'a sentence-final particle that indicates the speaker's call for confirmation or agreement from the hearer about some shared knowledge' (Makino and Tsutsui 1989: 286).

[28] Follow up questions are not only a feature of the doctor's discourse. Patient follow ups occur in SD consultations during sequences where the doctor is giving information about tests (invasive procedures) test results, illnesses, treatment plans or medications, etc. They typically occur in JD consultations either at the start, where the doctor explains protocols and the purpose of the consultation, or at the end when the doctor gives directions about where to go or what to do next.

ne functions like a tag question in English, with the same demand on the hearer to confirm or deny.

Here is a call for clarification from #32 (phase 4):

3	D: [un] de sono toki wa nante iwaremashita	*D: [uhu] and that time they said something to you*
4	P: iya (.) mou	*P: no (.) I already*
5	D: wakaranakatta	*D: you didn't understand*
6	P: nan mo tte iu ka (.) tada no yappa (.) shinkei kara kiteirun ja nai [ka to]	*P: they didn't say anything but (.) only the as (.) you see from the nerves it came I suppose [perhaps and]*

#32 (D =A3, F; P = F 38)

In this phase, which comes after the family history, the doctor is asking the patient about her previous experience of an endoscopy, which was very traumatic. She was retching throughout, and it turns out she was not given any anaesthetic to ease the pain. The doctor (A3 female) encourages the patient to continue her account of the experience with a call for clarification, wakaranakatta (= *you didn't understand?*). These questions occur at any time during the JD consultations, but in the SD consultations they appear more commonly near the end (phase 8), where the doctor checks the patient's understanding of his instructions about what will happen next. Checking questions sometimes appear to be for rhetorical effect – i.e. the preferred response to the question would be an affirmative, a backchannel, a repair, or indeed no response at all (which could be regarded as a tacit confirmation).

Recapping information and reassuring the patient with ne

The following sequence from the start of #65 (liver damage/pleurisy) shows calls for clarification by the doctor as he tries to establish the facts so far (phase 3 – checking and clarifying the patient's information).

1	D: <name> san douzou:	*D: Ms. <name> please come in*
2	(2.0)	*(2.0)*
3	D: ee to: ee to	*D: um and: um and*
4	(3.0)	*(3.0)*
5	D: soko shimete itadakemasu ka (.) kankinou shougai (.) ee to kyo↑nen kara wa detetan desu ne↓	*D: could you shut that for me (.) liver disease (.) um and since last year it appeared is that right*
6	P: kenkou shindan de	*P: in a medical check*
7	D: ee	*D: yes*
8	P: hai	*P: yes*
9	D: uhm naruhodo (1.0) maa tada demo (.) atai wa karui desu ne↓	*D: um: indeed (1.0) well in that case but (.) the value was light right?*
10	(7.0)	*(7.0)*
11	D: un: (.) ganka no hou↑ dewa ano me no hou wa (1.0) nanka sono jiko meneki shikkan tte iu no ni (.)kankei shiteiru tte iu (.) iwarete (.) mashita ka ne↓	*D: um: (.) at the ophthalmologist's um as for your eye some kind of (1.0) that auto-immunity disease as we call it (.) has something to do with you know the they say (.) did they say?*
12	P: hai (.) ichiou kyoumakuen tte to [iwarete]	*P: yes (.) basically pleurisy they [sai-],*
13	D: [ee↓]	*D: [yes]*
14	P: mashita kedomo	*P: -ai:d actually*
15	D: ee↓ (1.0) naruhodo ne un	*D: yes (1.0) indeed right ah*
16	(3.0)	*(3.0)*

17	D: sou ka (.) kankinou shougai ne: (.) uhm honno chokotto desu mo ne↓ (0.8) a koresuteroo↑ru toka (.) chuusei shibou chotto takame nan desu ne↓	*D: really (.) liver disease right (.) um: even it's only just a little (0.8) erm cholestoral etc. (.) neutral fat is a little high actually*
18	P: [aa]	*P: [uhu]*
19	D: [<cough>] <cough> kore mo mae kara iwaretemashita ka	*D: [cough] cough did they say about this before?*
21	P: chotto dake takai tte [iu]	*P: just a little high they [said]*
22	D: [chotto dake]	*D: just a little*
23	P: koto wa (.) iwaremashita	*P: (.) it was said*
24	D: ma (.) kore mo chiryou ga hitsuyouna hodo takaku wa nain desu kedo ne↓	*D: well (.) this too the need for treatment is not high actually, you know.*
25	P: aa	*P: uhu*
26	D: °chott:o dake takai mitai desu ne↓ e° (.) [un]	*D:just a little high , it looks like doesn't it (.) [um]*
27	P: [hai]	*P: [right]*
28	D: wakarimashita (.) un to ne: (.) chotto kanzou toka	*D: I understand (.) um and (.) just your liver and so on*
29	P: ee	*P: yes*
30	D: kensatsu shimasu n de ne (.) onaka dashite aomuke ni natte moraemasu ka tokubetsu karada (.) onaka itai toka sou iu no choushi warui toka nain desu yo ne↑	*D: I'm going to do an examination right (.) can you uncover your stomach and face up for me you haven't had any particular pain in your body (.) stomach or that kind of bad condition have you right?*
31	P: senaka ga kurushii desu	*P: my back is stiff*
32	D: senaka ga kurushii:	*D: your back is stiff*
33	P: hai	*P: yes*

(#65 P=F34; D=B4M)

The calls for confirmation often terminate with ne, delivered with falling intonation that is calming and reassuring, especially when stretched out as it is in desu mo ne↓ in line 17. When the doctor delivers important information about the patient's condition he uses ne to focus the patient's attention and reassure her – this can be seen in lines 5, 17, 24, and 26. The patient responds to these either with one word confirmatory backchannels (lines 18, 25, 27), or nothing audible (after line 5). On the other hand ne is not always delivered with falling intonation, and when it is not, it has a different effect on the interaction. For example, un to ne: in line 28, is flat, but drawn out, and appears to function as a filler to avoid a TRP and keep the turn. Also, desu yo ne↑ in line 30 has clear rising intonation, which is a strong call for confirmation, needing more than a simple backchannel from the patient (as in lines 18, 25, 27). The patient responds to this with new information about her back. The falling intonation on ne in lines 5, 17, 24, and 26 also appears when the doctor uses ee as a continuer in lines 13 and 15. This use of ee sounds almost like cooing and, as with downward ne, the effect is soothing, drawing the patient in, letting her know that what she has to say is important and indicating that the doctor will let her finish. Hence, this yielding backchanelling by the doctor achieves patient-centeredness by allowing her voice to be heard (empowerment) and establishing (or reinforcing) her position as a crucial and valued contributor to the diagnostic process.

5.3.6 Type IIb. Echo questions

An echo question is where one of the participants repeats all or part of the previous speaker's utterance in order to prompt a clarification. They usually come in phase 2 in which the patient is explaining the reason for attendance or in phase 3, the history of his/her illness. Echoes may be as long as a whole clause, or they may be just one key word. In the latter case, one-word echo questions need to be distinguished from one-word echoes that yield the turn to the current speaker, and which are more akin to backchannels. While they are not questions, they may be part of an adjacency pair that requires a confirmation.

Here are two echo questions from #4, where the doctor confirms the patient's information. In both these examples, the echo comes in overlap:

1	P: un to: (0.5) nana do roku (0.7) [bun]	*P: um and: (0.5) seven degrees six (0.7) [minutes]*
2	D: [nana do roku bun] nana	*D: [seven degrees six minutes] seven*
3	(5.1) <sound of writing (.) loud snap (.) sound of writing>	*(5.1) <sound of writing (.) loud snap (.) sound of writing>*

Line 2 is the echo question, asking the patient to correct the information if it is wrong.

4	D: o uchi de petto toka wa kattemasu?	*D: in your house do you have any pets?*
5	P: inu ga [imasu]	*P: I have a dog*
6	D: [inu ga iru]	*D: you have a dog*
7	(5.0) <sound of writing>	*(5.0) <sound of writing>*

(#4 P=F20s; D=A5M)

In neither example do we hear the confirmation to the echo question, but we might assume a non-verbal as the second part of an adjacency pair, since in both cases the doctor is satisfied enough to write down the information (lines 3 and 7).

An echo need not follow directly after the utterance it is echoing – it can be delayed by intervening turns, as in the following example from #71:

1	P: tte koto wa (...) de (.) ano yappari watashi wakkanai (.) wakkanai na mon desu kara (.) doushitemo ano (.) sore kara seki ga suru [...] seki ga suru mune ga kurushii mon desu kara	*P: they said that thing (…) and (.) um as you see I Wakkanai (.) I am from Wakkanai actually (.) so willy nilly um (.) because of that we get coughs (…) we get coughs painful chest because of that*
2	D: hakike ga suru	*D: you feel nausea*
3	P: hai	*P: yes*
4	D: mune ga kurushii	*D: painful chest*
5	P: hai mune ga itaku te (.) kakaritsuke no isha ni itta n desu ne	*P: yes my chest hurts I tell you (.) I went to the family doctor you see*
6	D: hai	*D: yes*

(#71 P=M53; D=A6M)

Echo questions therefore help the patient to sort out potentially relevant information from actually relevant information. The doctor uses the patient's own words to highlight some piece of information and encourages him or her to say more about it. The doctor uses echoes to signal what is important and to give the patient permission to develop a point that either he or she did not think was important, or that he or she may not have been confident in explaining at length even though he or she thought it might be relevant. They direct the

patient to expand on a topic and indirectly affirm the patient's decision to mention that information in the first place. Thus, they enhance the image of the diagnostic process as a cooperative event.

5.3.7 Type IIc. Leading questions

A leading questions is a question phrased so as to prompt or suggest a preferred answer, but in its more general sense it is a 'loaded' or 'searching' question, that requires a guarded answer (Allen 2002) (e.g. *How do you feel about such terrible behaviour?* as opposed to *How do you feel about behaviour of that kind?*). In a medical consultation leading questions are one way in which the doctor can help the patient put his/her problems into words, and focus on the things the doctor feels need to be eliminated in the deductive process (e.g. *Would you say the pain was similar to being hit over the head with a large mallet?*). So they might appear as an example that the doctor offers up to the patient to be confirmed, or they could be a list of choices from which the patient is expected to select on option. They require a preferred response from the patient. Syntactically, leading questions in English often involve using question tag (e.g. '*It isn't sore in the mornings, is it*?'), usually involving a negative form.

Silverman et al (2005) discuss how doctors can make effective use of closed and open questions. The doctor should move from non-specific open questioning to more focused closed questions "to investigate specific areas if they do not emerge from the patient's account, to analyse a symptom in detail and to make a functional enquiry", as well as overcome the doctor's "perceived loss of control and potentially more disordered information gathering inherent in the use of open-questioning" (ibid: 75). On the other hand, they report that studies have shown that open questions allow the patient to express their concerns in their own way, revealing "substantially more relevant information than closed questions", so it is desirable to begin the consultation "with a lengthy period with little in the way of detailed probing" (ibid: 76-77).

Leading questions deduce a conclusion from information the patient has given. Including this category under the general heading of checking for information is not totally satisfactory, as leading questions are sometimes used to elicit new information (we can see an example of this in the sequence from #37 below). However, given that they often occur tagged with desu ne or sometimes with a negative question (e.g. ja nai desu ka), the preferred response to them is a confirmation from the patient. They are also common at moments of deductive reasoning, where the doctor is calling for confirmation. Here is a leading question from #71 (phase 4c), showing the doctor trying to find out exact information about the patient's smoking:

1	D: sore ee to: wakai koro	*D: next um and: when you were young*
2	P: sou desu ne	*P: that's right*
3	D: nijuu dai	*D: in your twenties*
4	P: hai	*P: yes*
5	<sound of writing>	*<sound of writing>*
6	P: de (.) genzai wa (.) mou	*P: and (.) these days (.) I've already*
7	D: ima (.) nondemasen	*D: now you don't smoke*
8	P: nan se (.) nantonaku sekinin (.) kotae wo kanjite (.) desu kara nichiyoubi kara	*P: some respon (.) somehow I feel responsibility (.) <to give> the answer (.) so since Sunday*

(#71 P=M53; D=A6M)

The doctor picks up the hint from the patient's mou (*already*) at the end of line 6, setting up the message with genzai (*these days*), which looks back to and contrasts with the previous sequence about his youth (lines 1-4), therefore indicating to the doctor that things have changed. mou therefore serves to push the message home, and with this the doctor now has all the information he needs. However, in order to attain the status of evidence the patient is required to state this overtly, which is why the doctor asks the leading question in line 7 expecting the confirmation. In fact, the patient's reply in line 8 is a qualifying prelude to his explanation 6 turns later that he has given up since Sunday because his cough had taken away his taste for cigarettes.

Directing the patient

In the following sequence from phase 4b (family history) in consultation #3, we can see how the doctor uses leading questions to direct the patient. The leading questions are underlined in lines 1 ,3, 5 and 13.

1	D: aa (.) maa shinzou no byouki tte itte mo iroiro [atte]	*D: ah (.) well talking of heart diseases you said there are many*
2	P: [ee.]	*P: [right]*
3	D: ben ga umaku ikanai toka [desu ne]	*D: the valves go wrong and so on [right]*
4	P: [ee (.) ee]	*P: [yes (.) yes]*
5	D: fuseimyaku datta toka (.) sore wa chotto wakaranai [desu ka?]	*D: and there's arrhythmia (.) just don't you know about that*
6	P: [sou iu] uum (.) motomoto ga sou iu keikou ga atta toka iu to chotto wakaranain desu kedomo nee (.)	*P: [that kind] um: (.) at the beginning there was that kind of tendency they say but I don't really understand actually (.)*
7	D: uun.	*D: uhu*
8	P: cho (.) chotto gese nain da keredomo (.) un to (.) sei mariannu byouin toka itteta [kana]	*P: ju (.) a little strange though (.) um: (.) went to saint marian's hospital etc. [perhaps]*
9	D: [ee]	*D: [yes]*
10	P: socchi no hou ni kayotte (.) shibaraku no aida kayotteta kedomo (.) iya kayotte (.) tokidoki kenshin uketeta rashiin dakedomo (.) ano saishuuteki ni (.) wa (.) ano shinfuzen (.) shinfuzen tte daredatte shinfuzen nandakedomo:	*P: I went to and from there (.) for some period of time went to and from but (.) nope back and forth (.) sometimes had something like a general check up but (.) in the end (.) that heart failure (.) heart failure*
11	D: sou desu ne (.) [uum]	*D: is that right (.) [umm]*
12	P: [maa] ishu no totsuzen shi to.	*P: [well]*
13	D: maa (.) kuwashii koto wa chotto [wakaranai]	*D: well (.) you just don't know it in detail*
14	P: [wakaranai kedo] gan dewa nai desu	*P: I don't know, but it isn't cancer.*

(#3 P=M65; D=A5M)

This patient has a lot of interest in and evident knowledge of his own illnesses, which the doctor has had plenty of time to ascertain, since right from the start of this consultation the patient was explaining in detail about the cancer he is now suffering from. He was dominating in the early stages of the consultation, and the doctor was having difficulty in steering him in the direction he wanted (see §5.5.2 below)[29]. In this section he is talking about the illness that his youngest sister suddenly got ten years ago. As he has done throughout this consultation the patient wants to give as much detail as possible, but here it is apparent that he does not know very much about his sister's condition. This sequence occurs well into the consultation (380 turns in) and there would be more pressure to use time more effectively than in at an earlier stage of this long consultation. Therefore, leading questions, which are a more assertive and effective way of prodding the patient to give the required information, are a more likely choice for the doctor at this stage.

5.4 Question types in combination

Having established the question categories that appear in the Japanese consultations let us return to the sequence presented at the beginning of this chapter (**Episode 5.1**) to see how the doctor's questions are being used in combination.

1	<sound of writing>	*<sound of writing>*
2	D: hai ato desu ne (.) arerugii to ka sou iu mono wa wa nai de[su ka]	*D: yes (.) next right (.) as for as for allergies, etc. that kind of thing you don't have any do you?*
3	P: [nai desu (.)]	*P: [I don't have any (.)]*
4	D: arerugii nai (.) o kusuri to ka (.) sou iu no wa jinmashin to ka	*D: no allergies (.) as for medicines etc. (.) that kind of thing nettle rash etc.*
5	P: nashi	*P: nothing*
6	D: tabemono daijoubu desu ne	*D: foods are okay right?*
7	P: sou desu ne	*P: that's right*
8	D: go jitaku de petto toka desu ne (.) katte rasshaimasu?	*D: in your (honorific) house (.) do you keep any?*
9	P: neko wa kattemasu	*P: I have (keep) a cat*
10	D: neko toku ni sono (.) ma neko san de (.) me ga kayui toka [shoujou wa↑]	*D: the cat especially that (.) well on account of the (honorific[30]) cat (.) do have symptoms such as itchy eyes*
11	P: [(...) nai desu]	*P: [(…) there isn't]*
12	D: ato desu ne (.) (PNAME) san desu ne (.) ato go kazoku to iu ka (.) issho ni	*D: next right (.) Mr. <PNAME> right (.) next talking of your (honorific) family (.)*

[29] It also emerges during phase 3 (the patient's account of the presenting illness) that this patient works as a member of the administration staff at this university until 5 years ago, which may have an impact on the doctor patient relationship here – this doctor has just qualified, and in his contact with administration staff as a student he would have been in a –power position.

[30] It is very unusual to use 'san' as a title for an animal, even for someone's pet: in a more informal register 'chan' would be usual and unremarkable, but in this formal setting the doctor should just use 'neko' without any title. Throughout his consultations this young doctor is idiosyncratic in his use of Japanese honorific forms, tending to overuse them given the institutional setting. We can see this clearly in #2, for example, where his patient is a middle-aged woman. In that conversation, it seems that these small mistakes confuse the expected power relationship and irritate the patient.

	sundeiru hou dewa nakute desu ne (.) ma (.) chokkei no chi no tsunagatta kata desu ne	*next talking of your (honorific) family (.) not who you live together with right (.) well (.) your blood relatives right*
13	P: hai	*P: right*
14	D: iden (.) ma (.) dake dewa kaishaku dekinai desu ke domo:	*D: genetic (.) well (.) only, well it can't be interpreted actually:*
15	P: identekina mono de (.) warui mono wa nani mo (.) watashi wa nai to omotte[masu]	*P: genetically based things (.) there is nothing bad (.) I don't have any I think*
16	D: [ee] a (.) sou desu ka (.) chotto kousei (.) kousei oshiete itadaite yoi desu↑	*D: [yes] ah (.) I see (.) just the structure (.) would you be able to explain the structure for me*
17	P: haha to [ma chichi (.)]	*P: my mother and [well father (.)]*
18	D: [otousan to] okaasan ga irasshatte go kyoudai wa↑	*D: [your father and] mother are there, how about (honorific) brothers and sisters?*
19	P: kyoudai ga ne (.) juu nan nin ita kana↑ juuichi nin kana↑	*P: right as for brothers and sisters (.) over ten people there are is it? eleven of them is it?*
20	D: juu ichi nin (.) a: (…)	*D: eleven of them (.) ah (…)*
21	P: onna (.) otoko go nin onna roku nin kana	*P: women (.) men five people women six people is it?*
22	D: (…) otousan to okaasan ga ite (.) Kyoudai ga ichi. (.) ni (.) san (.) yon (.) go (.) kyuu (.) juu (.) juuichi nin irasshatte (.) chotto ue kara oshiete itadaite yoi desu ka	*D: (…) your father and mother are there (.) as for your siblings there are one two three four five six seven eight nine ten eleven people (.) just from the top would you explain about them for me*
23	P: ee to (.) oshieru tte koto wa?	*P: so um (.) by explain you mean?*
24	D: ee to otoko to onna to	*D; so um males and females*
25	P: otoko (.) onna	*P: males (.) females*
26	D: ee	*D: yes*
27	P: ee to choujo ga onna:	*P: so um the oldest is female:*

(#37 P=M56; D=A5M)

The question in line 2 changes the topic and asks for new information, so it is a type Ia (probing) question, although with its negative tag it appears to be leading the patient to some degree, so it could be categorised as a leading question. Line 4 contains two questions: the first part is a type IIa checking the patient's information in 3. There is a micro pause, offering a TRP but there is no audible response from the patient. After the micro pause there is another type Ia closed question, with an example by the doctor to help focus the patient about the scope of the question – 'Do you have any allergies, such as nettle rash?' The patient answers 'no' in 5, then in 6 the doctor double checks about the possibility of allergies with a leading question (type IIc), but expanding the scope of allergies from 4, to include food allergies. desu ne is what makes it leading, as the preferred response is a confirmation, but it is also a deduction from the information just given, so the risk of a dispreferred response is slight. The patient gives a confirmation in 7, and the doctor now moves on to another topic with a follow up question in 8, introducing the topic in the first half of the utterance, then pause then the verb in interrogative at the end. The patient affirms in 9, rewarding the probing question, and sets up the doctor for the type Ib question in 10 asking for more information about the cat – does the patient have any negative reaction to the cat hair? Again, the doctor delivers the question with a helpful example – the 'itchy eyes' does not lead P., so he can

confirm or deny with equal probability.

The patient answers negatively in 11. In 12, the doctor moves on to another topic, the patient's family, prefacing with ato desu ne. The doctor makes two attempts at this type Ia question, the second attempt is in 14: in the first part of the utterance he addresses the patient directly by name, which is highly unusual in the data overall – doctors often use the patient's name in the greetings section and less often in the closing phase, but very rarely at other points of the consultation. So its use here is marked, showing particular politeness. The next part after the pause gives the topic (family), which is immediately followed by a repair marker (to iu ka), a pause, then the repair itself in three parts: 'not who you live together with'; pause; a filler (ma), giving the doctor a moment to rephrase; pause; 'but your blood relatives, right'. The patient's hai in 13 is a backchannel, allowing the doctor to repair again in 14 after his fumbling in 12. The doctor comes up with 'genetic', pauses, and prods the patient towards a response In 15 the patient shows he understands what the doctor is getting at, echoing the key word 'genetically', then answering in the negative, which he reiterates at the end of this turn. However, the patient has misunderstood the question, so in 16 the doctor repairs, starting with an overlap, which stops the patient developing the genetic illness theme any more, then a (.) so desu ka (gaining time), followed up by chotto, signalling a repair, then coming up with a better word to prompt the patient - kousei (*structure*) - that he formulates into an interrogative form in the last part of the sentence.

In 17 the patient begins to give the information the doctor wants, but pauses, seemingly for confirmation that this is the kind of information the doctor wants. In 18 the doctor confirms that the patient has now understood the doctor's previous question by repeating his answer in overlap, then asks for more details ('how about brothers and sisters?'). The patient gives this in 19, but the number of siblings in his large family needs a bit of thinking out loud, so his initial figure of ten is given with rising intonation and lengthened, after which he changes the figure to eleven, which is also uttered with rising intonation. The doctor calls for confirmation of the second figure with an echo question (type IIb) in 20, which the patient confirms in 21 by breaking down the whole figure into number of boys plus number of girls. In 22 the doctor asks a type Ib question, asking the patient to develop the number of siblings into a chronological sequence, but he chooses a very pedantic way to phrase the question, seemingly to make absolutely sure that there is no misunderstanding about the information he wants after the trouble in lines 12-16: numbering each sibling, pausing, then asking the question itself. The patient is still unclear and calls for clarification in 23. The doctor clarifies the information he wants in 24, the patient echoes this in 25, and the doctor confirms this echo in 26. Finally in 27 the patient begins his answer to

this question.

We can see from this how the doctor uses a variety of questioning forms to open up new topics, focus the patient, get more details from the patient, call for the patient to clarify information he has given, and to negotiate repairs when the patient misunderstands him (i.e. trouble). The doctor has to get the information he wants as clearly and quickly as possible and the patient wants to give this information, so they work together to enable the construction of an outcome that they are both satisfied with, allowing them to proceed to the next stage of the consultation with the same understanding of the issues.

5.5 Patterns of questioning in the consultations (question counts).

In the final part of my investigation into doctor's questions I used a concordancer to make a quantitative study of the data. Each consultation was searched separately to record the number of questions asked by doctor, patient and third person, (if they were present) and entered them into a spreadsheet. In all, just over 2,000 questions were identified in the 72 consultations. I calculated the percentage of questions by doctor or patient and the proportion of each participant's turns that were questions (the total number of participant's turns divided by the total number of participant's questions). Table 5.3 presents the averages for the JD consultations, the SD consultations, and for all the consultations. Appendix 12 contains the statistics for all the individual JD consultations, and Appendix 13 contains the statistics for all the individual SD consultations.

Table 5.3 shows both the mean number of questions asked across the 72 consultations, and the mean scores for the 35 JD consultations and for the 37 SD consultations. Questions account for about 17% of all utterances in all the data, but there was a higher proportion of questions in the JD consultations than in the SD consultations (23% vs. 13%). In both types

Table 5.3: Questions across the Japanese Consultations

	Turns	**Qs**	**% Qs**	**% Qs by P**	**% Q by D**	**D Turns**	**P Turns**	**%DQs**	**%PQs**
JD MEAN	230.0	49.5	22.6	7.3	92.7	115.0	112.3	41.7	3.5
STDEV	*107.66*	*20.88*	*5.14*	*4.99*	*4.99*	*53.58*	*52.21*	*8.91*	*2.77*
SD MEAN	198.2	24.0	12.9	20.9	76.4	106.5	92.2	19.2	4.9
STDEV	*109.20*	*20.68*	*8.26*	*16.16*	*20.39*	*57.23*	*50.03*	*13.66*	*3.81*
ALL MEAN	213.7	36.4	17.6	14.3	84.3	110.6	102.0	30.2	4.2
STDEV	*108.87*	*24.30*	*8.45*	*13.82*	*17.02*	*55.26*	*51.73*	*16.14*	*3.40*

% Qs = proportion of all turns that were questions
% Qs by D = proportion of all questions that were asked by doctors
% Qs by P = proportion of all questions that were asked by patients
% DQs = proportion of doctor's turns that were questions
% PQs = proportion of patient's turns that were questions

of consultation it is the doctor who asks most of the questions (overall 85% of questions are asked by the doctor). Since the power asymmetry between doctor and patient is fairly clearly defined, this is unremarkable, as the participant with more power would be expected to have more facility to direct and ask for information of the participant with –power. However, this asymmetry is not absolute; there are instances in my data where the patient becomes the dominant participant, as can be seen in Dialogue #55, where the doctor has to apologise to the patient about a lack of clear instruction that has resulted in the patient missing a medical procedure (see Chapter #7).

The proportion of questions by doctors in the JD consultations is higher than by doctors in the SD consultations (93% v. 77%). However, this is also to be expected, as the JD consultations comprise largely of history-taking phases whereas the SD consultations involve much more explanation of the illness, the test results or follow up procedures. Even so, since on average almost 60% of the doctor's utterances in the JD consultations were not questions, these consultations are not mere interrogations. In fact, as I show in §6.2, many of the doctors' utterances are backchannelling behaviour, or continuers at possible TRPs where the doctor gives back the turn to the patient, allowing him or her to further develop his/her account. Finally, it can be seen that, overall, patients rarely ask anything of the doctor; across the data as a whole the proportion of patients' utterances that are questions is relatively small (overall mean = 4.2%), there is a slight difference between the means for each set of data (JD = 3.5%; SD = 4.9%).

These means give us useful baseline data on differences in questioning between doctors and patients and between SD doctors and JD doctors as a whole. I shall now look at patterns of questions in each of the consultations separately (presented in full in Appendix 12 and Appendix 13): setting this information against the information in Table 5.1 it is possible to see how interrogative (many questions and answers) or explanatory (long narratives from the patient or the doctor) the consultations are.

JD consultations

Appendix 12 shows the spread of questions asked in each JD consultation. I have sorted these in ascending order according to the proportion of doctor's turns that were questions. The average D : P ratio of questions in the JD consultation is just under 93%, and there is little deviation from the mean in the individual consultations (the standard deviation is 4.99). In #3 the proportion of questions by patients is relatively high (15% of all questions), but these questions constitute only 4% of all turns by that patient, and this consultation has relatively few questions overall (the total number of questions as a proportion of all turns was only 14%, compared to the JD mean of 23%). This consultation was unusual in having very

few questions by the doctor (only 25% of his turns were questions compared to the JD mean of 41%).

The most revealing column in this table is the proportion of doctor's turns that were questions (%DQs), because of the difference it shows between the questioning patterns of the SDs and the JDs. As I noted above, in the JD consultations the mean for %DQs is 41%, which is much higher than the mean for %DQs in the SD consultations, which is 13%, although there is some deviation in the individual consultations, ranging from 23% in #18 to 59% in #22 (the standard deviation is 8.91). In #13 (patient presenting with worsening asthma) the proportion of doctor's turns that are questions is 55.56%, the second highest, and in this patient's follow up (SD) consultation the proportion of doctor's turns that are questions is also unusually high (62.5%, compared to the mean of 12.82%).

SD Consultations

Appendix 13 shows the spread of questions asked in each SD consultation, sorted in ascending order according to the proportion of doctor's turns that were questions. In contrast to the JD consultations, the proportion of questions asked by the patient in the SD consultations varies considerably across the individual consultations (standard deviation = 16.16). In the SD consultations as a whole patients ask just over 20% of the questions, but we can see that in some SD consultations the patient does not ask any questions at all (#6, #9, #10 and #5), while in others e.g. #59, #54 and #28, the patient's questions account for 60%, 59% and 47% of all questions respectively. However, in the latter three cases the percentage figures are misleading, since questions only account for a small proportion of actual turns in these consultations.

Doctor's Questions vs. Patient's questions

More questions by the doctor might suggest that he or she is using institutional power to direct the patient. However, data on the total number of questions is too crude a measurement to be sure of this, since it does not tell us about the nature of each question. While many questions are clearly part of the information gathering process of history-taking where the doctor is directing the patient, in the diagnosis phases where the doctor discusses treatment possibilities, questions may be used to empower the patient. For example: "How would you feel about having the operation in a smaller hospital where there is a shorter waiting time?" In the JD consultations there is no treatment phase, so questions about possible treatments do not appear, whereas in the SD consultations the doctor is generally checking for understanding or asking the patient to do something ("Can you get on the examining table for me?" "Can you breathe out slowly for me?"). In many SD consultations the diagnosis is not yet resolved, so there is no reference to treatment plans. In those

consultations where the doctor does give a treatment plan these are presented as a series of instructions rather a presentation of choices to allow patient empowerment. Even so, a more precise classification of question types would further clarify whether questions indicate directiveness or empowerment through mutual participation.

On the other hand, more questions by the patient might suggest that the doctor is being more patient-centred by allowing the voice of the patient to emerge with calls for repair, further explanation or negotiation. More of this would be expected in the SD consultations than the JD consultations because in the latter the patient is trying to give his account, whereas in the former the doctor is considering the medical evidence and trying to formulate a diagnosis. A patient-centred approach would have more patient involvement in this process. On the other hand JD conversations with fewer questions by the doctor show more patient-centeredness, since they show less intervention by the doctor as the patient gives his/her account. Of course, these raw counts of questions give us only an initial understanding of how cooperative a consultation is, so it is necessary to examine the kinds of question that are asked, and at what point they are asked. To address this, in the next section I consider the question types used by doctors to elicit information from the patients, how they allow or encourage the patients to elucidate their stories. and how the patients respond to these questions. I examine this by focusing on the kinds of questions the doctor asks, particularly on questions in phases 3 and 4 of the consultation, which is largely, but not entirely, the task of the junior doctors.

5.6 Questioning and patient-centredness

Question counts are only a rough indicator of how the interactions were played out, so to investigate what kind of questions were being used identified and categorised a series of question types used by the doctor, in particular in the history-taking phase of the consultation.

I identified two categories of questions – eliciting new information, and calls for clarification, which I then developed into five sub-types. Through examples of sequences in the data I showed how the doctor uses this stock of question types to coax or steer the patient to give the necessary information. I tried to show how the patient-centred doctor uses echoes and calls for clarifications.

Next, I gave a quantitative overview of questions according to JD and SD consultations, in an attempt to show differences in patient-centredness. I suggested that in the SD consultations more patient-questions is one indicator of patient-centredness, as the doctor creates an atmosphere in which the patient feels comfortable to voice concerns or ask for more information. On the other hand in the JD consultations more questions and intervention is more directive and less patient-centred. Accordingly, question counts across the

consultations allow us to make some preliminary observations about how patient-centred individual consultations are compared to the averages. Differences between the three sets of consultations can also be determined and then compared.

In the next chapter I develop the investigation of patient-centeredness further through the examination of firstly, how the doctor encourages the patient to continue the narrative through backchannelling; secondly, how the doctor's long explanations about treatment, medical procedures and the prognosis accommodates the patient; thirdly I see how the voice of the patient emerges through his/her calls for clarification, and voicing his/her concerns.

6. THE VOICE OF THE PATIENT

6.1 Introduction

In this chapter I explore ways in which the doctor empathises with the patient, focusing mainly on the diagnostic stages of the consultation. The doctor's institutional role gives him/her the most power to influence the degree of patient-centeredness, and I analyse how this is achieved though an examination of doctors' utterances in the Japanese data. I begin by examining the nature of patient-centeredness in §6.2. Then, in §6.3, I examine how the doctor encourages the patient to continue the narrative through backchannelling. This section gives a statistical overview of variations between the JD and SD consultations according to doctor's backchannels, patient's turn length, and turn length according to the patient's age. Following this in §6.4 I examine the later phases of the consultations; what Byrne and Long collectively refer to as 'diagnostic' (pp103-112), and within my own framework, these are accounted for by phases 5-8. In these phases, the roles of the participants are reversed; the doctor gives long explanations while the patient listens and backchannels. I consider sequences where the senior doctors give long monologues as they explain and reassure patients about illnesses, results of tests and forthcoming procedures or treatments, and check for understanding. I examine how the doctor accommodates the patient through these long explanations. Finally, in §6.5 I consider how conversations become more patient-centred by moving away from doctor talk to include the patient in the discussion and negotiation of his/her treatment, which may involve the need for further tests, or it discussions of treatment options. I also look at how the patient is further accommodated by being given the opportunity to ask for clarification about the information he/she has been given, especially towards the end of the consultations.

6.2 Social and discourse influences on patient-centeredness

6.2.1 The principle of mutual participation

The communication skills programme at Hokkaido University Graduate School of Medicine is based on patient-centred (mutual participation) principles, specifically the LEARN model: *Listen, Explain, Acknowledge, Recommend, Negotiate*. During the course, students are taught about types of questioning (open, closed, calls for clarification), how to show empathy, the difference between 'illness behaviour' and 'health-care seeking behaviour', the Szasz and Hollander trichotomy and verbal versus non-verbal communication (e.g. issues of personal space) (Maezawa 2002). The course culminates in workshops for final year students that are 2-3 hour sessions involving 3 or 4 students at a time, each of whom

performs a consultation role play with specialised actors (as patients) in front of their peers and the professor of primary care. Their performance is assessed immediately through verbal feedback from all those participants, on the basis of both clinical/medical knowledge and the effectiveness and appropriacy of the student's communication skills.

6.2.2 Empathy

One way in which doctors achieve patient-centredness is through empathy. Roter (2002) employs empathy as one of her categories of socioemotive exchange (e.g. *This is distressing for you, I understand.; You seem to be a little tense.; You must be worried*.). Empathy is when the doctor shows sensitivity to the patient, and considers what the patient might know, so he/she can explain something in a more effective way. Here is an example from phase 4a in consultation #48, where the patient presents with bowel discomfort:

1	D: okosan wa futari desu ka	*D: have you got two children?*
2	P: ee (3.5) <writing>	*P: yes* *(3.5) <writing>*
3	D: chotto ukagai zurain desu kedomo (.)	*D: erm this is a little difficult to ask but (.)*
4	P: hai↑	*P: yes?*
5	D: saishuu gekkei wa ima kara itsu gurai: saigo ni:	*D: from now your last menstruation was about when: the last one:*
6	P: ee to desu ne	*P: and um well*
7	(3.0)	*(3.0)*
8	P: kongetsu ga desu kara (.) hachi gatsu no (...)	*P: this month is (.) August the (…)*
9	(19.0) <rustling of bag or papers, banging sounds>	*(19.0) <rustling of bag or papers, banging sounds>*
10	P: hachi gatsu no sanjuuichi nichi kara isshuukan (.) desu kara (.) hachi gatsu (…)	*P: one week from August the thirty-first (.) so (.) August (…)*
11	(1.6)	*(1.6)*
12	D: ja sanjuuichi nichi kara	*D: well since the thirty-first*
13	P: hachi gatsu no sanjuuichi nichi kara (.) isshuukan desu ne	*P: one week from August the thirty-first (.) one week that's right*

(#48 P=F42; D=A1M)

In this sequence the JD puts himself in the position of the patient by prefacing a personal question with an apology for having to ask it. He imagines how he might feel if he were the patient and someone were to ask him for this information. So line 3 acts as a preface to prepare the patient for the intimate question that follows in line 5, and it may indicate his own discomfort in having to ask it. The patient's sharp hai↑ in line 4 indicates that she is paying attention and is now expecting a difficult question. The doctor then asks the necessary question, and in line 6 the patient responds by acknowledging she has understood and is willing to answer. This initial ee to desu ne assures the doctor that the patient is cooperating with the question, so the following long pause is not problematic, taking her time to think, holding the floor. After this in line 8 she works her way to the answer in a matter of fact manner by calculating the date out loud, and getting out some notebook or diary to check

this (line 9). This attention to the facts is a good way of mitigating any possible embarrassment of the intimate content of the question.

6.2.3 Parallelism

Another way in which the participants seem to be exhibiting solidarity is through *parallelism*. This is when one participant mimics the word, phrase or mannerism of the previous speaker in the following turn, when other lexical choices are available and maybe even more usual (i.e. not using a default phrase). Look at the following sequence in #15:

1	D: sutoresu toka kakaru kai↑	*D: you don't have any stress or anything?*
2	P: hai↑	*P: come again?*
3	D: uun (.) anma sonna ni ishiki suru hou demo nai↑	*D: umm (.) not so much that you're aware of*
4	ishiki suru hou demo nai desu ne kekkou	*P: not that I'm aware of, that's right, quite*

(#15 D=B3; P=M32)

The doctor's question in line 1 comes as the patient is taking his jacket off to have a physical examination. Immediately preceding this the doctor had made a joke about the patient's fever coming on just as he left for work in the morning, which both participants responded to with laughter, so the question may have been triggered by the work reference. The patient's response in line 2 prompts the doctor to repair his initial attempt by answering suggesting an answer to the patient, which the patient echoes in line 4 to confirm. This is parallelism. The term has been used to describe this kind of echoing during bilingual code switching, where B re-uses a phrase A has just used (Zentella 1997: 97). Johnstone (2001) defines *grammatical parallelism* as 'recurring words or particles such as *see, I say,* or *lo*, and repeated numerical patterns of phrases' (ibid: 640). Parallelism builds up rapport and allows the second speaker to respond with an echo: repeating the previous speaker's phrase needs less brainwork since the second speaker does not need to make an original phrase; it signals that the previous speaker's utterance has been understood; and it must also serve to promote solidarity, since it is flattering to the previous speaker to have his words repeated. Every utterance is thus presented as a resource that potentially the next speaker can take and use (or choose not to), as it has now been made part of the interaction.

Therefore, through empathy and parallelism the doctor can be patient-centred by being sensitive to the feelings of the patient. However, what factors enable the doctor to make the consultation patient-centred or not? To answer this, I shall consider four theoretical concepts: *social distance*, *power, recipient design* and *footing*. After this, in §6.2, I examine the diagnostic stages of the Japanese data for evidence of patient-centeredness,

6.2.4 Social distance and solidarity

Social differentiation considers how social context, social class, sexuality and

ethnicity cause variation in discourse (Trudgill 2002: 373), therefore identifying a speaker or writer as being a member of a particular speech community. Members of the same speech community have a detailed understanding of jargon and behaviour that is typical of their own group, thus they feel more solidarity with each other than they do with non-members. The degree to which people are separated by their speech communities, and consequently their familiarity with each other's behaviour and discourse style is their *social distance*. *Solidarity* is a scale of perceived like-mindedness or similarity of behavioural disposition between a speaker and addressee deriving from their similar backgrounds, acquaintance, or personal characteristics (SIL 2006). Will a doctor and patient who know each other well behave differently (hence use different ways of speaking) than a doctor and patient who have never met before? As explained in §3.1 I deliberately eliminated social distance as a variable in this research by ensuring that all the conversations were between strangers: all the patients were either new cases or referrals; in this respect, the Japanese university hospital setting differs substantially (see *§3.4.3 Participants*) from either a typical GP surgery in the UK or from the kind of Japanese local clinic that Ohtaki et al examined in their study (Ohtaki et al 2003).

6.2.5 Power

In this section I want to draw attention to the importance of the asymmetry of power, in the medical setting (defined in §3.3). Drew and Heritage (1992) argue that firstly it is an oversimplification to say that mundane conversation is symmetrical but that institutional discourse is asymmetrical, since without asymmetry of knowledge there would be no need for any communication between the participants (Drew and Heritage 1992: 47~53). However, they do not say if this would allow for certain purely phatic conversations where any facts that are communicated are obviously known to both parties (such as a conversation about today's weather between two people at a bus stop). Secondly, they say that at a given TRP there is always asymmetry between the initiator and respondent, and if these individual instances were added up over the complete conversation we would be able to show that one participant has more knowledge than the other about the speaking context or the topic, so in the interaction as a whole it could be said that there is an overall asymmetry between the two participants. On the other hand, one way in which institutional discourse is fundamentally different from everyday conversation is that the roles of the participants are independent of their individual identities beyond this interaction (ibid: 48).

Directives

Ueda and Hasegawa's (1999) study of Japanese doctor's directives to patients showed how the directness of the utterance was affected by the psychological distance between the participants and the urgency of the directive (Table 6.1). In other words, the

degree to which a face-threatening action FTA is mitigated by either positive politeness (language that signals liking and approval) or negative politeness (language that minimizes the imposition of the speaker on the hearer) (Brown and Levinson 1978: 102, 131).

Table 6.1: Hierarchy of directives used by doctor

Low ← ← ← Degree (urgency) of directive from D to P → → → High					
Big ↑ ↑ Psychological distance between Doctor and Patient ↓ ↓ Small	*~sasete itadakitai +n desu yo + desu ke do ~sasete itadaite ii desu ka*	*~ shite itadakitai + n desu yo*	*~ shite itadakimasu*	*~shite mite kudasai ~shite oite kudasai*	*~shite kudasai + ne*
		~ sasete moratte ii desu ka	*~te kuremasu ka*		
			~ shite mite ~ shite kureru + ka na	*~ shite*	
	~ ni narou + ka na (+ ?)				

(Ueda and Hasegawa 1999: 29) Author's translation

In this way we learn how the participants 'do' doctor-patient talk without recourse to their cultural, institutional or personal background, or making any assumptions about lexical or behavioural (verbal or non-verbal) choices that might be available to them. In order to examine doctors' use of directives I carried out a corpus search for `-te kudasai` and other hedged directives, presented in Table 6.2. The directive of choice among all doctors is `-te kudasai`. JDs gave much fewer directives than SDs (the ratio is 1 : 3), and they tended to use more polite forms. SDs usually used the lower register `moraemasu ka` (JDs rarely use `moraemasu ka`), and rarely used the politer form `–te itadakemasu ka`.

Table 6.2: Tokens of hedged directives

`-te kudasai` (please do X)	T = 259, D = 254	JD = 47 SD = 207
`-te itadaite` (do me the favour of doing X)	T = 17 D = 15	JD = 4 SD = 11
`-te moraemasu ka` (can you do me the favour of doing X?)	T = 38, D = 33	JD = 3 SD = 30
`-te itadakemasu ka` (can you do me the favour of doing X?) (`itadaku` is an honorific form)	T = 40 D = 40 (`omachi` (wait) + `oshiete` (show) = 24)	JD = 22 SD = 2
`-te itadakitain desu kedo` (actually (I) want you to do (me) the favour of doing X.)	T = 11 D = 11	JD = 8 SD = 3
`-te itadakitai to omoimasu` <I) want you to do (me) the favour of doing X I think (wonder>.	T = 3 D = 3	JD = 2 SD = 1

It might be argued that the doctor politeness formulae and hedges are not necessarily patient-centred and the doctor is just going through the motions of reducing power. While it is

impossible to know the psychological motivations of the doctor at any particular moment of the consultations, the fact remains that there are always a range of pragmatic choices available to the doctor whenever he/she makes a request to the patient My analytic approach assumes that nothing any of the participants says is accidental: they are always aware of the potential illocutionary effect of their utterances, which they choose according to their experience and expertise as native speakers of the language. Therefore, if a doctor hedges, rather than uses using a bald on-record directive he/she has consciously decided to do this, calculating it will be the most effective way of a) maintaining their relationship and, thereby, b) getting the patient to do what he/she wants. The doctor is always free to assert or mitigate his/her power, so an instance of hedging through positive or negative politeness must indicate that the doctor has chosen to mitigate a request or a directive. Given that the default power asymmetry in this institutional setting is in favour of the doctor, the more the doctor hedges, the more evidence there is that he/she is treating the patient as an equal partner in the interaction. It would not be unreasonable to conclude that the doctor is doing this in order to be more patient-centred.

-te kudasai is a politeness marker used for circumlocution or to mitigate or a directive, and is similar in function to 'please' in English ('please do me the favour of doing X.') (Martin 1988: 963). A search for -te kudasai revealed 259 tokens across the data as a whole, all but four of them are by doctors. The fact that patients rarely issue directives is not very surprising in itself, as obviously it is the doctor who is directing the consultation, not the patient. Of the four tokens of –te kudasai by the patient, two of these are where the patient is reporting what a previous doctor had instructed him to do, one is a self-repair ('wait a minute …'), and only one (in consultation #21) is used to hedge a directive. In #21, there is a negotiation about the date for the next appointment. The patient asks if the sixteenth of the month is possible. The doctor hesitates (u:m (.) iyam) saying it's the beginning of Autumn so he's a little worried 'well (.) but (.) yeah, that's all right'. The patient then replies using -te kudasai in utterance 6 below:

1	D: sore de: (.) ichiou ikkagetsu yousu wo mite (.) dakara juu gatsu no hajime goro no kayoubi ni chotto kite itadaite (.) ma (.) chi o totte (.) ma (.) ketsueki ga dounatte iru ka shirabetain desu kedo mo (.) ma (.) ichiou aru teido yoku nareba ne (.) tsuuin wa maa (.) ni kagetsu kurai made nobashite mo ii to omoundesu kedo (.) kihonteki ni wa ikkagetsu ni ippen zutsu kite (.) kettou chi (.) jibun ga ima no yarikata de ii no ka toka ne (.) kakunin shiteitte hoshiindesu↓ juu gatsu no futsuka toka ne↓	*D: and: (.) roughly one month we'll see how everything is going (.) so on Tuesday around the beginning of October if you'd be kind enough to come (.) well (.) take your blood (.) well (.) I want to check your blood actually (.) well (.) roughly to what extent if it's better right (.) as for treatment (.) continuing it for about two months will be enough I think but (.) basically at one month bit by bit come (.) blood sugar level (.) (if) you yourself (are happy with) the present way of doing things and so on right (.) I just want to confirm (that) ↓ October second or so you know ↓*

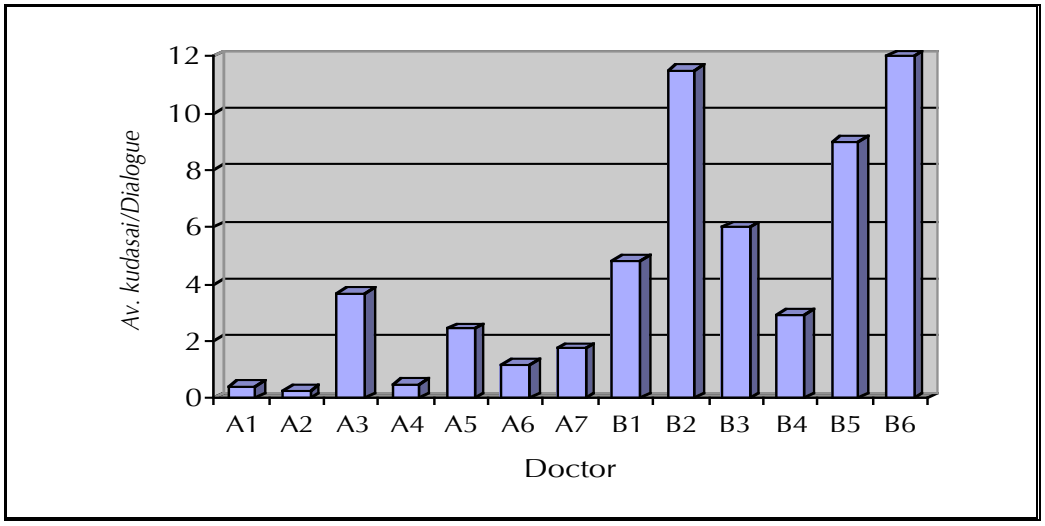
2	P: nahn: oukei desu↓ a. (.) futsuka no hi:	*P: errm: that's OK↓ a. () the second:*
3	D: ga (.) tsugou ga warukereba (.) kokonoka toka dou desu ka↑	*D: but (.) if it is inconvenient (.) how about the ninth or so*
4	P: uun (.) chotto toriaezu (.) shitara futsuka to kokonoka chotto are nande (.) juuroku dattara mazui desu↑	*P: umm (.) just for the time being (.) if it's the second and the ninth there's that (.) if it's the sixteenth is that no good*
5	D: uum (.) iyam juu roku demo ii n desu kedo chotto aida ga akisugiru no ga chotto ki ni narundesu kedomo (.) ma (.) demo kekkou desu↓	*D: mmm (.) nope the sixteenth is also fine but just the interval is but if you don't feel up to doing that (.) well (.) but that's fine*
6	P: hai (.) suimasen↓ chotto juu roku ni shite kudasai↓	*P: right (.) sorry to trouble you well please (can we) make it the sixteenth↓*

(#21 P=M38; B6M)

Japanese Doctors' usage of *-te kudasai*

On looking at the frequency of usage by type of doctor, it can be found that it is the SDs who consistently use kudasai most (see fig. 6.1).

Figure 6.1: Distribution of te kudasai by doctor



The JD average is 1.31 tokens per consultation, while the SD average is 5.75 per consultation. JDs either do not use kudasai at all in their consultations, or they use it once or twice at the greetings phase (suwate kudasai = 'please sit down') or the closing phase (matete kudasai = 'please wait'). From the graph A3 appears to be an exception to this trend. However, while this young female doctor uses kudasai five times in her opening utterances in consultations #32 (P=F38) and #40 (P=F46). she does not use it throughout the rest of the consultation.[31] Here is the opening of Consultation 40:

[31] This doctor begins all three of her consultations by introducing herself, explaining that this is a preliminary interview before the main consultation, and checking that the patient is OK with the consultation being recorded, reminding the patient that she will turn the recorder off at any time if they become uncomfortable with it – actually, as I explained in Chapter 3, I didn't want the doctors to mention the recorder during the interview, but this point wasn't clear for some of the doctors. In all, the recording process was mentioned in six of the consultations.

1	D: hai douzo o hairi kudasai ohayou gozaimasu	*D: yes please come in good morning*
2	P: ohayou gozaimasu	*P: good morning*
3	D: douzo o kake kudasai (.) douzo osuwari ni natte kudasai (.) ano: setsumei wa	*D: please (.) take a seat (.) please sit down by all means (.) uhhm: it was explained*
4	P: a: hai	*P: ah yes*
5	D: atta to omou n desu kedo: kou yatte rokuon sasete itadaitemasu node: moshi ano tochuu de yada to omottara itsu demo: kore kirimasu node: osshiette kudasai	*D: to you i think but: as you have been kind enough to allow yourself to be recorded: if um in the middle you feel uncomfortable any time I'll turn this off (.) please tell me.*
6	P: a: ke: kekkou desu:	*P: aa kay: that's alright*
7	D: hai sore ja shinsatsu no mae ni kore made no keika toka ni tsuite ohanashi wo kikasete kudasai (.) <NAME> to moushimasu	*D: right well then before your examination I'd like to hear about the course of events until now. My name is Dr. X*
8	P: hai	*P: yes*

(#40 P=F46; D=A3F)

On the other hand, A1 does go against the general trend, using oshiete kudasai twice in Consultation 3. In fact, this young male doctor uses an unusual amount of polite language in this conversation with a middle-aged woman, perhaps suggesting he is uncertain about asserting his power.

There is a correlation between the length of the conversation and the number of instances of kudasai, but the main factor affecting the frequency is whether the doctor carries out a physical examination or not – i.e. whether he gives instructions to the patient to move his/her body. For example, doctor B1 has 16 consultations, and in six of these he uses more than five tokens of kudasai. All of the instances are during consultations that include physical examinations

Physical Exam: 29 (12), 28 (11), 26 (7), 30 (7), 53 (5), 55 (2), 56 (5), 59 (4), 31 (2), 52 (2)

No Physical Exam: 57 (4), 58 (3), 27 (2), 51 (2), 54 (1), 24 (1), 25 (0)

This is not surprising, but it is another indicator that the doctor is leading the conversation. At no point in B1's conversations does the patient ask the doctor to do anything. In another sequence from #31, during the physical examination, it can be seen how the doctor varies the forms of directives.

1	(15)	*(15)*
2	D: aa <voice> tte (.) hai (.) shita wo ue ni agete moraemasu ka (.) hai kekkou desu (.) ja shinzou no oto mazu saisho ni kikimasu .	*D: aa <voice> you say (.) yes (.) can you lift your tongue up for me? (.) right that's fine (.) so your heart (sound/beat) first let's listen to that*
3	(6)	*(6)*
4	D: ja tsugi mune no oto desu (.) karuku kuchi wo akete fukai iki wo suttari haitari	*D: right next your chest (sound) (.) slightly open your mouth breathing in and out with deep breaths*
5	(12)	*(12)*
6	D: hai (.) ushiro muite kudasai (.) onaji you ni kuchi wo akete sutte	*D: right (.) turn round please (.) in the same way open your mouth and breath in*
7	(13)	*(13)*
8	D: koko ni aomuke ni nete kudasai.	*D: lie down on your back over here (please)*

9	(20)	*(20)*
10	D: <cough> onaka sawa rimasu .	*D: <cough> I'll touch/feel your stomach*
11	P: hai	*P: yes*
12	D: hiza tatete moraemasu ka.	*D: can you draw up your knees for me?*

(#31 P=M56; D=B1M)

X wo shite moraemasu ka	= can you do X for me?;
X wo shite	= do X;
X wo shite kudasai	= do X (please)

There is no discernable difference in the politeness level of each imperative[32], so why does the doctor mix the stylistic forms? One possible answer might be that the cumulative effect of using only one form might sound too insistent:

- *Do this. Do that. Do the next thing. Do that one more time.*

Alternatively, it may be too polite and therefore stylistically clumsy:

- *Can you do this for me? Can you do that for me? Can you do the other for me?*

OR

- *Do this please. Do that please. Do the other please. Do that one more time please.*

On the other hand, in #8 B5 uses –te kudasai 24 times to instruct the patient, about half of these instances are in the physical examination and the rest are giving instructions about where to go next, and tests.

What does the doctor's use of directives tell us about patient-centeredness? A patient-centred doctor might be expected to open phase II with a power-neutral question such as '*What can I do for you?*' rather than the more paternalistic '*How can I help you?*' (which implies that the doctor is in a position to help, thereby indicating the patient's dependency on him/her) in order to mitigate the power asymmetry. Yet, to what extent does this approach actually work in practice and how much do patients want to be empowered? Given the expectations of the patient there may be pressure on the doctor to take a more guiding hand. In other words, the patient has come to consult the doctor as the expert, and therefore expects, or even wants, an asymmetry of power during the consultation and he or she may not be comfortable with or capable of negotiating treatment options. The patient-centred doctor wants to include the patient in the decision-making, asking such questions as '*Is this alright with you?*', '*What do you think?*' or *'Do you think it's …?'* These kinds of questions may be good ways to explore the patient's expectations about their illness and bring him/her into the discussion, but the doctor-centred patient might well respond with the dispreferred '*Well, what do you think doctor?*' This recalls Morgan's assertion about how easy the decision is to

[32] There would, however, be a clear difference in politeness level between shite moraemasu ka and shite itadakimasu ka. The latter form has the same meaning of 'Can/could you do X for me', but it is much more formal.

make (how serious the illness is, how invasive the treatment is, what risks are involved, etc.). Added to this is the time constraint, which is clearly controlled by the doctor. It affects how much opportunity the doctor gives to the patient to ask questions. If a patient comes in with a list of questions or worries, the doctor needs to have an effective strategy to find out the main problem as efficiently as possible (e.g. '*Which question are you most worried about?*') So it is difficult to see how a doctor can avoid taking control and asserting his/her power during the course of the consultation.

I return to the question of the interplay between institutional and cultural factors in Japanese consultations in Chapter 7. I interpret power in terms of the alignment taken up between the participants, and my task is to explore whether this alignment is caused by the institutional setting or by cultural factors. In other words, both participants are aware that the institutional setting gives the patient less power to control the course of the interaction, since the patient is the knowledge seeker, therefore dependent on the doctor to get what he or she wants, whereas the doctor, as the expert or keeper of knowledge, has power installed on him/her by the institution, and therefore more ability to determine the course of the conversation by asking questions, interrupting, changing topic and ultimately bringing the conversation to an end.

6.2.6 Recipient design

Recipient design was first discussed by Sacks & Schegloff in their paper on the organisation of reference in a two person conversation (Sacks and Schegloff 1979). Nofsinger defines it as the 'shaping of utterances to fit the needs and backgrounds of the other participants who will likely interpret those utterances' (Nofsinger 1991: 49). Compare this with *audience design*, which is when the speaker (consciously or not) chooses a stylistic level for the audience he or she wishes to address (Spolsky 1998: 41). As an illustration, Nofsinger discusses stories: 'A story will not be told in detail to someone who already knows it, and the telling will be modified if some of the participants either know all or part of the story or are somehow involved in the story'. Stories are therefore designed to take into account who the participants are with respect to the story itself (for example, knowing versus unknowing recipient) and with respect to each other (friends, strangers, relatives, business colleagues, and so on). The descriptions used in the story seem to be controlled as much by the relationship among the conversational participants (and other features of the storytelling situation) as by the actual event being described. This suggests not only that social relationships influence storytelling, and probably other conversational activities as well, but that such relationships are constituted, or created, in part by these activities (Nofsinger 1991: 155-161).

Recipient design is therefore important in understanding patient-centredness, not so much from the point of view of the patient's telling his/her story but from the way in which the doctor formulates questions and explains symptoms, test results, treatment plans or prognoses. This is because it is usually the doctor who controls the direction and content of the consultation through his/her institutional power. We can see this in action in phase 4a of #35, where the JD creates a supportive and open atmosphere to encourage the patient to mention any previous illness:

1	D: ee to izen ni desu ne: go byouki toka sareta koto nai desu ka	*D: and er before now ri:ght you haven't had any illness or so on have you?*
2	P: nai desu.	*P: I haven't*
3	D: nan demo (.) tsumaranai koto demo kekkou desu yo.	*D: anything at all (.) even a boring/small thing is alright*
4	P: iyaa nai	*P: no:: nothing*
5	D: kodomo no koro demo kekkou desu kedo	*D: even when you were a child is alright*
6	(3.0)	*(3.0)*
7	P: nai desu ne: demo osan shita ato nan ka boukouen mitaina no ni wa natta koto arimasu kedomo	*P: there's nothi:ng although after giving birth I did develop something like inflammation of the bladder actually*
8	D: ee.	*D: right*
9	P: demo hotondo ima wa	*P: but basically now*
10	D: sou desu ka. osan wa nankai shitan desu ka	*D: is that so? How many times have you given birth*
11	P: san kai desu ne	*P: three times*
12	D: ee to	*D: and er*

(#35 P=F50; D=A5M)

Line 3 tries to prompt information giving the patient much freedom, and line 5 leads even more, which perhaps explains the three second pause as the patient tries to sift her mind for something that might be helpful for this kind doctor who is doing his best to encourage her. The result is that she tentatively offers the bladder infection, which gives the doctor something to investigate further, but his quick follow up in 10 is not directly related to the infection – it calls for basic factual information, which she answers and then he asks about her menstruation (the next 10 turns) before moving to lifestyle question (phase 4c). In this way the doctor rewards the patient for her information in line 7 by giving a follow up, but the content of the follow up signals that he is not giving much importance to the infection in relation to the presenting illness. Therefore, patient-centeredness is created through recipient design: the doctor's utterances are shaped to create and maintain their social (doctor-patient) relationship through empathetic questioning and explanation of the information.

6.2.7 Footing

Another way that patient-centredness is created is through footing. Goffman sees the self as a public construction through 'face', a social or interactive construction, which is "the positive social value a person effectively claims for himself by the line others assume he has

taken during a particular contact … The maintenance of face is a condition of interaction, not it's objective." (in Schiffrin 1994: 102). Schiffren comments:

> Goffman's work focuses on how the organization of social life (in institutions, interactions, and so on) provides contexts in which both the conduct of self and communication with another can be "made sense of" (both by those co-present in an interaction and by outside analysts) (ibid: 102).

Footing is resonant with recipient design in the way it sees speakers targeting particular utterances to particular participants in the conversation. Goffman explains it as follows:

> A change in footing implies a change in the alignment we take up to ourselves and the others present as expressed in the way we manage the production or reception of an utterance. A change in footing is another way of talking about a change in our frame for events (Goffman 1981: 128).

A change in footing could be signalled by code-switching to another register, where, for example, a speaker switches from targeting his/her utterances solely at the direct listener, to targeting eavesdroppers, or other indirect participants or listeners. The relation of an individual to a particular utterance is their 'participation status' and the relation of all the individuals in the gathering to that utterance is the 'participation framework' (ibid: 137). Therefore, a speaker can promote solidarity with an eavesdropper by switching to a register that resonates with him/her in a way that it does not with the direct listener. Goffman explains how footing works in the history-taking stage of a paediatric consultation including the doctor, the patient and the patient's mother (ibid: 142-3). The doctor is very businesslike, unceremoniously running through his checklist of questions, writing notes, checking files or documents as the mother patiently waits 'on call' only speaking when she is spoken to. Thus, the participants are sustaining a state of inquiry, not a 'state of talk', in which the mother would have equal speaking rights and be able to lead with her own questions (142). This means that the institutional roles dictate the way the participants behave and how they may and may not speak: they know what their footing is. Footing works because the participants know how to interpret an utterance because they know who is being addressed and what the expected role of the addressee is in the conversational context. In the case of the Japanese data both the patient and the doctor arrive at the consultation knowing their institutional roles. If the doctor chooses to use his/her institutional status to conduct through a series of directives and interrogatives with no third part follow up (i.e. the guidance-cooperation model, Table 2.1) then it will be less patient-centred than if he/she chooses to engage the patient in a cooperative process where the contributions of both parties are integral to the diagnostic process (i.e. the mutual participation model, Table 2.1).

6.3 Patient Narratives and Doctor Backchannelling

In §2.3.3 I explained how Maynard had identified differences in the backchannelling behaviour of Japanese and American students – the Japanese students' higher use of backchanneling showed that they possessed a strong inclination for mutual monitoring and cooperation. If this were the case in casual conversations between Japanese speakers, would it also show up in the medical consultations? Specifically, how does backchanneling by the doctors contribute to patient-centredness, if indeed it does at all? In this section I investigate backchannelling by the Japanese doctors as they listen to the patient's narrative during the diagnostic phases of the consultations. Through analysis of the data, in the concordancer I identified four backchannels that appeared frequently across all the consultations as a whole. I then analysed the frequency of occurrence of these backchannels firstly in each consultation, and secondly in the JD consultations as a whole and in the SD consultations as a whole. In addition, I identified sequences where there were long turns by the patient with little or no interruption by the doctor. Yielding backchanneling by the doctor and the allowance of long patient turns would indicate patient-centeredness, so I wanted to see statistically in which consultations this behaviour tended to be exhibited most.

6.3.1 Patterns of Backchannelling

In order to make a quantitative study of backchannels in the Japanese data, I had to decide which utterances I would count as backchannels; in particular it was important to make a clear distinction between continuers and newsmarks or 'assessments' Goodwin (Goodwin and Goodwin 1987), since both usually take the form of short (one, two or three word) turns by the listener set between a series (two or more) of longer utterances by the speaker. An examination of the data revealed a very high frequency of the following verbal expressions: hai, ee, un, a:, so desu ka, so ka, or so desu ne (c.f. Maynard 1997: 139-141). By Nofsinger's criteria, it became clear that the first four utterances were not newsmarks, whereas the latter three usually were, since they contained a semantic component (by this I mean the former four made no comment on the previous speaker's turn, they were signalling that the previous speaker could keep the turn, whereas the latter three showed surprise, puzzlement, approval, agreement or called for elucidation of the previous speaker's utterance in some other way). The former could only be uttered with falling intonation, whereas the latter might be uttered with rising intonation to indicate a call for clarification. Non-verbally, the former utterances could only have been replaced by a simple affirming signal such as a head nod, whereas the latter might also have been expressed by a frown, a widening of the eyes or other questioning type behaviour.

Having identified these four dominant continuers, I carried out a statistical analysis of

them in order to find out about the overall patterns of backchannelling by each participant, even if there were other less frequent expressions that were being used as backchannels that I did not look at. I only counted these words as backchannels where they constituted the only verbal utterance by a listener and did not interrupt the current speaker's narrative (i.e. they were yielding the turn). Occasionally a backchannel was uttered twice in one turn (e.g. P: ee ee) before the next speaker took his/her turn, in which case I counted that turn as one token of that backchannel. Table 6.3 reveals word counts in all 72 consultations.

Table 6.3: Backchannelling by doctor and patient

Backchannel	All instances	By Patient (in overlap)	By Doctor (in overlap
hai	2032	1579 (206)	453 (33)
ee	1044	494 (88)	550 (84)
un or a:	531	274 (76)	257 (57)
Total	3607	2347 (370)	1250 (174)

All P turns = 7345; All D turns = 7965

These four backchannels accounted for about 24% of all turns in the consultations overall, but patients backchanneled more than twice as often as doctors (P = 32%; D = 15%). Overall, more patient backchannels would be expected because of the institutional role of the doctor as the giver of information. However, whoever is backchanneling is obviously influenced by the phase - doctors would be expected to backchannel more during the history-taking phases as they encourage the patient to develop his/her story, while patients would backchannel more during the diagnosis and treatment phases, when they must listen to the doctor as he/she uses his/her professional knowledge (that they do not have) to explain, consider and interpret medical information. This means that we would expect JD doctors to backchannel more than SD doctors, and SD patients to backchannel more than JD patients.

The most common form of backchannel by patients was hai, but for doctors the most common form was ee. Finally, overall, I counted 14% of backchannels as coming in overlap, but in the SD consultations un or a: was uttered in overlap by the doctor in 50% of instances.

Next, for each consultation, I calculated the proportion of all turns that were backchannels, broken down by participant, and by utterance type. The results for each JD consultation are presented in Appendix 14 and for each SD consultation in Appendix 15. Table 6.4 presents the means for all JD consultations, all SD consultations and for all the consultations as a whole. Table 6.4 shows that in the JD consultations both patient and doctor are backchannelling to a similar extent (about 20% of all turns), although the figure for the doctor is slightly higher than for the patient (D = 21%; P = 18%). The fact that backchannels account for 21% of JD doctors' utterances also reflects the different phases of the JD consultations; in phase 3, where the patient is telling his/her account of the illness, the doctor

Table 6.4: Backchanneling behaviour in JD and SD consultations

	Backchannels as proportion of all turns						Backchanneling by utterance type					
	Patient			*Doctor*			*Patient*			*Doctor*		
	Turns	**BK**	**(%BK)**	**Turns**	**BK**	**(%BK)**	***% hai***	***% ee***	***% un***	***% hai***	***% ee***	***% un***
All Mean	102.0	32.6	*(32.1)*	110.6	17.5	*(14.6)*	67.5	21.9	10.5	37.5	36.9	21.4
St. Dev	51.7	26.4	*18.1*	55.3	17.8	*10.4*	25.3	20.9	14.3	33	31.1	20.5
JD Mean	112	21	*(18.4)*	115	26.6	*(21.3)*	69.2	22.8	7.94	45.3	35.7	19
St. Dev	52.2	15.5	*7.32*	53.6	20.8	*9.69*	25.3	22.7	14.5	35.3	31	17.1
SD Mean	92.2	43.6	*(45)*	106	8.89	*(8.22)*	66	21.1	13	30.2	38.1	23.6
St. Dev.	50	29.8	*15.5*	57.2	7.66	*6.08*	25.6	19.3	13.9	29.2	31.7	23.3

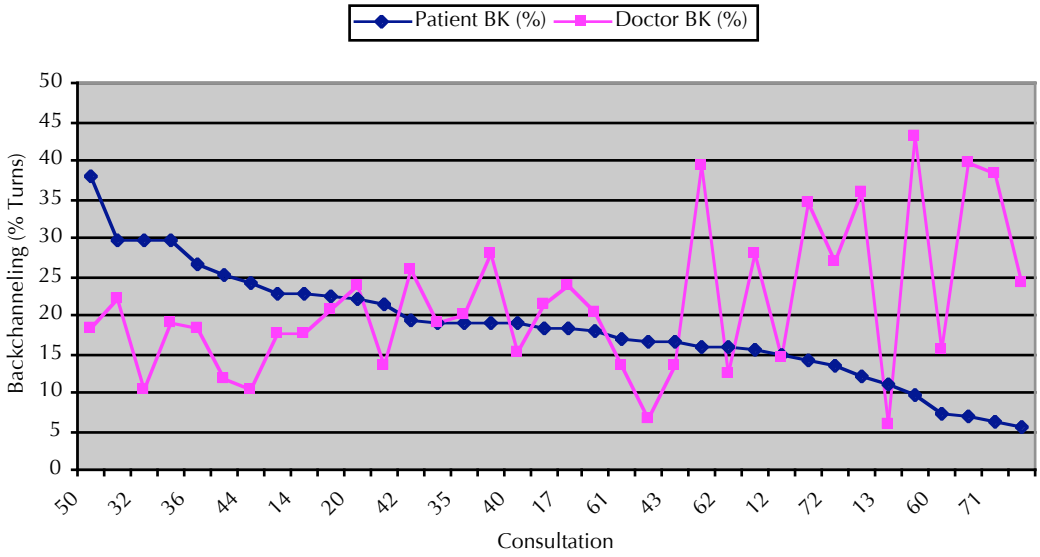
BK = backchannels

is listening and encouraging through backchanneling, allowing the patient leeway to develop the account in his/her own way, but in the later stages there is more intervention by the doctor as he or she guides the patient with more focused questioning or explanations and clarifications. This is also consistent with the analysis regarding the questioning patterns I discussed in Chapter 5.

Backchannelling in the JD consultations

Regarding individual consultations, Appendix 14 shows the percentage of backchannels in the JD consultations, sorted in descending order according to patient. The range for patients is from 5.6% to 38%, and the range for the junior doctors is from 5.9% to 43.2%. Figure 6.2 (below) shows that to some extent the proportion of patient and doctor

Figure 6.2: Backchanneling in Junior Doctor Consultations



backchannelling was inversely related, so the consultations where the doctor backchanneled most tended to be those where the patient backchanneled least (e.g. 71, 18, 39, 37, 70, 3). However, some notable exceptions to this can be seen; instances where the doctor's

backchannelling is particularly low relative to the patient's (#22, #13 and to a lesser extent #43, #61 and #62). Backchannelling by doctors was particularly high in #39, #3 and #18, and particularly low in #13 and #22. Also, in #18 the patient's average turn length was highest.

Backchannelling in the SD consultations

On the other hand, in the SD consultations, there is a big difference between the average level of backchannelling by patients and doctors (P mean = 45%; D mean = 8.22%) as can be seen in Appendix 15. This shows that the patients are usually listening, while the doctor is usually talking.

Figure 6.3: Backchanneling in Senior Doctor Consultations

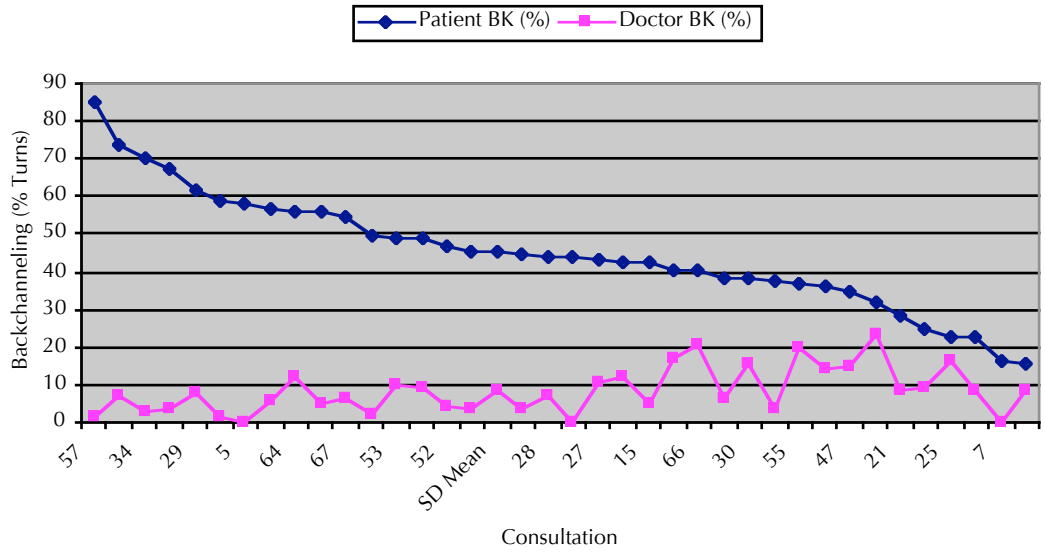


Figure 6.3 (above) shows considerable variation in the proportion of backchannelling by patients in the SD consultations (15.7% - 84.9%). However, the variation in backchannelling among the senior doctors was low (mean = 8.22%; standard deviation = 6.08), regardless of the degree of patient backchannelling. The consultations with most patient backchanneling were #57 (84.7%), #31 (73.8%), and #34 (70%), and the those with least backchannelling, indicated from extreme right were #9 (15.7%) #7 (16%) and #26 (22.7%))[33]. In #9 the patient has presented with chronic coughing and much of this consultation is taken up with questions and answers about the condition (phase 3) with the patient coughing throughout, and by the end of this consultation the doctor has ordered an injection, after which he will see her again. As a consequence, there is more urgency and this has pushed the consultation towards the guidance-cooperation model, resulting in less participation by the patient in the diagnostic process.

[33] Due to the scale of this graph only every second value can fit on the horizontal axis shows so #31, #9, #26 are not labelled.

SD doctor's backchanneling occurs most in consultations involving a history-taking phase. In the following sequence from #51 (patient backchannels = 40% patient turns; doctor backchannels = 18.8% doctor turns) the patient talks about his relatives' illnesses and deaths while the senior doctor uses a variety of backchannels and calls for clarification to guide the patient's narrative.

1	D: byouki de areba nansai ni dou↑itta koto de nakunarimashita	*D: if it was illness how old was he and what kind of thing did he die of*
2	P: iya (.) byouki tte ne (.) byouki tte shinai desu ne:	*P: no (.) as for illness (.) he didn't die because of illness*
3	D: ano: ano: ato oto (.) otousan (.)	*D: u:m u:m then your fath (.) father (.)*
4	P: ee (.) chichi wa n[e:	*P: right (.) my dad*
5	D: [ee	*D: yes*
6	P: ano koutsuu jiko dattan desu	*P: um it was a traffic accident*
7	D: a: sou deshita ka.	*D: oh is that so?*
8	P: shokku shinde (.)	*P: he died of shock*
9	D: [ha:	*D: oh:*
10	P: [hachijuu no toki ni nakunari mashita ke [do	*P: he died at the age of eighty actually*
11	D: [haa:	*D: oh::*
12	P: hahaoya mo (.) sono mama ato are data kedo (.) byouki tte iu byouki shinaide nakunatta (.) arya yappa (.) kyuujuuichi made ikimashita kara	*P: my mother also (.) just like that after that it was but (.) to call it illness it wasn't illness she died of (.) that indeed (.) since she lived until she was ninety-one*
13	D: rousui mitai (.) [rousui]	*D: something like senile decay (.) [senile decay]*
14	P: [ee rousui datta]	*P: [yes it was senile decay]*
15	D: datta desu ne	*D: it was*
16	P: desu ne (.) hai	*P: it was (.) yes*

(#51 P=M81; D=B1M)

Lines 5, 9 and 11 are one word backchannels that yield the turn and allow the patient to keep developing the story, while line 7, a: sou deshita ka, has an emotional quality that signals interest in the patient's information in line 6 and encourages him to keep talking. It therefore has more content than a simple backchannel. Line 13 is a prompt by the doctor, and line 15 is an echo, calling for clarification.

6.3.2 Long narratives by the patient

Another way of considering the doctor's backchanelling is to identify those sequences where there are long narratives by the patient, or where the overall proportion of a patient's speech in a consultation (the patient's word count) is high. It is important to remember that only verbal backchannels are present in the data. For this reason, there are very long monologues that have no apparent response from the listener, but in which it may be assumed that there is some form of non-verbal backchannelling from the doctor in the form of head-nodding and so on.

Goodwin discusses how, in narratives involving more than two participants, permission for extended turn and the entry and closure of extended turns is determined by the teller's body position and the gaze between the speaker and the recipient (Goodwin 1984: 228-236). First I

consider briefly some statistical data that shows the spread of turn length by the patient throughout the data. The longest patient turns occur during the history-taking phase, the patients give accounts of their illnesses and the doctors give explanations about illnesses, treatments and procedures.

Table 6.5: Consultations with longest patient turns (by number of words)

Consult	No. long utts*	Doctor A = JD; B = SD	Patient	Total Utts	Total words	Av Utt length
18	22	A1	M38	234	2426	10.37
71	21	A6	M53	320	2323	7.26
3	18	A5	M65	460	3493	7.59
48	14	A1	F42	243	2178	8.96
73	12	B2	F77	518	4534	8.75
21	10	B6	M38	165	2871	17.40
40	10	A3	F46	333	2388	7.17
49	10	A1	M71	238	2497	10.49
35	9	A5	F50	365	2864	7.85
17	7	B3	M75	189	1347	7.13
20	7	A1	M52	136	1187	8.73
70	6	A6	F77	271	1840	6.79
60	6	A2	F62	187	1261	6.74
45	4	B4	F42	195	359	1.84
36	4	A5	F62	255	1548	6.07
46	3	B4	M61	253	2956	11.68
25	3	B1	F51	128	1272	9.94
72	3	A6	F30	150	857	5.71
61	3	A2	F34	116	815	7.03
50	3	A1	M37	409	2578	6.30

*200 longest Patient Consultations = most long utterances over 30 words.

Table 6.5 shows those consultations where the patient is doing most of the talking; in fact not only is the patient talking a lot, but also the doctor is not interrupting very much, even to backchannel. Thirty-six consultations do not appear among those with the 200 longest patient utterances. Looking at each consultation in more detail Appendix 16 ranks all the consultations according to the mean turn length (number of words uttered) by patient. It can therefore be seen that the consultation with the longest patient turns is #18, (mean patient turn length is 18.15 words), and the consultation with the shortest patient turns is #57 (mean patient turn length is 1.54 words). The overall mean is 6.16 words (StDv = 2.06); the JD mean is 8.1 words (StDv = 3.25); the SD mean is 4.24 (StDv = 3.16). Hence, most of the longest patient turns (the top half of the table) appear in the JD consultations, while most of the shortest patient turn lengths (the bottom half) appear in the SD consultations.

Before considering the implications of these statistics, I shall present this same data in a slightly different way: the proportion of all words in each consultation that were uttered by the patient compared to the overall length of the consultation (total words uttered by both participants). I wanted to establish if there was any correlation between these two variables,

to see whether or not longer consultations would result in relatively more patient talking time, more doctor talking time, or whether there was no particular effect of one on the other (Figures 6.4-6.7).

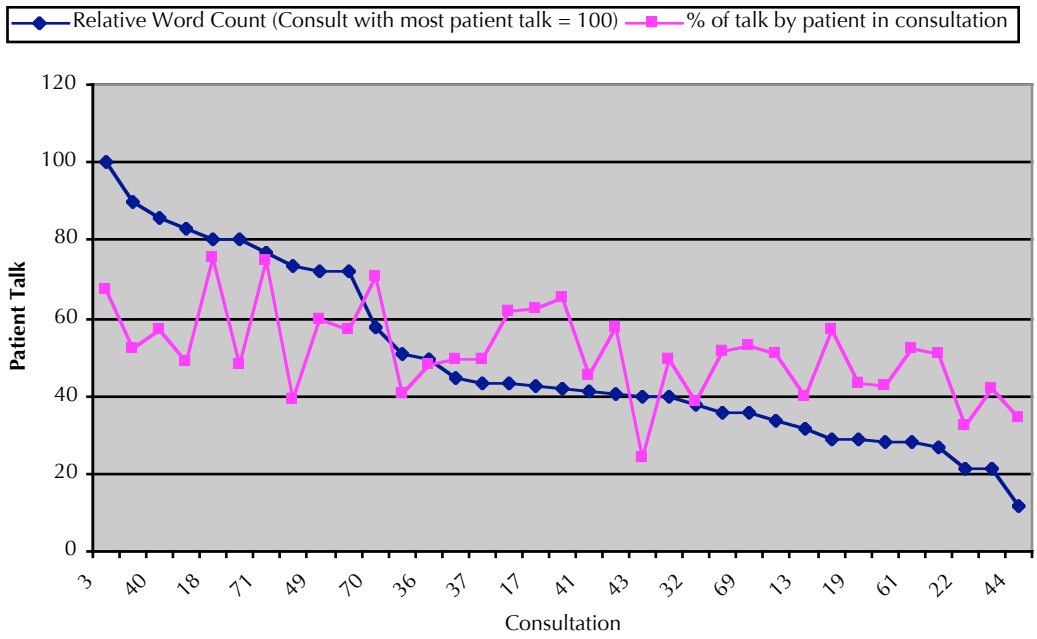
Calculating the charts

I carried out the word counts for each consultation by each participant and calculated the percentage of words uttered by the patient. To be able to compare this figure with the total number of words for each of the two kinds of consultation, the word count was converted into a percentage (longest JD consultation = 100% and all other JD word counts were relative to this; longest SD consultation = 100% and all other SD word counts were relative to this).

In the JD data the longest consultation (#3) was 3503 words (=100%), and the shortest consultation (#44) was 397 words (= 11.3% of the longest one). In the SD data the longest consultation (#73) was 4820 words (=100%), and the shortest consultation (#58) was 520 words (= 10.8% of the longest one). In this way I had two sets of data for JD and SD consultations that were both expressed in percentages and could thus be compared against each other on the same line graph (Figures 6.4; 6.5).

Before looking at the information in Figure 6.4 I had expected to find that short JD consultations would have proportionately more doctor speaking, as I imagined the patient

Figure 6.4: Proportion of patient's speech according to consultation length (JD)



would be giving short answers to the probing type questions and not adding to the calls for clarification, while the doctor would be trying to get the patient to talk with longer leading questions including examples and explanations. If the patient was unable to give much

information answer much beyond giving minimal responses, the history-taking would quickly run its course, and the consultation would end. On the other hand I predicted longer consultations would have more detailed narratives from the patient, and with less prompting from the doctor.

In fact, Figure 6.4 shows many peaks and troughs, roughly between the 80th percentile and the 40th percentile, but initially it is difficult to see any strong pattern. However, moving from left to right, there is in fact a slight downward trend, which indicates that – on average – the longer the consultation is (i.e. the more words that are uttered overall), the higher the proportion of words are uttered by the patient. This is confirmed by comparing means for different sections of the line %P words:

- Top third mean (Longest 11 consultations; Range = 3503-2014 words): 58.99 % of talk is by P
- Middle third mean (Middle 12 consultations; Range = 1789-1332 words): 49.20 % of talk is by P
- Bottom third mean (Shortest 12 Consultations; Range = 1261-397 words): 45.76% of talk is by P
- Top half mean (Longest 17 consultations; Range = 3503-1497 words): 56.50% of talk is by P
- Bottom half mean (Shortest 18 consultations; Range = 1464-397 words): 45.99% of talk is by P

While I cannot confirm conclusively that there is a correlation between length of the JD consultation and the proportion of utterances by doctor and patient, it is interesting to see the slight downward trend in patient's contribution as the consultations got shorter, which gives tentative support to my initial prediction.

There is a notable exception to the general pattern, caused by #43 in the middle of the line, in which the patient's utterances account for only 24% of total utterances. Why does the doctor talk so much in this consultation? On looking at the consultation in more detail it turns out there is a problem at the start of the consultation, which causes a deviation from the usual history-taking format. Here is a sequence that appears just after greetings have been exchanged:

1	D: ee to desu ne: seikeigeka no <NAME> sensei no hou kara o tegami wo itadaiteru n desu ga:	*D: um and ri:ght I've got a letter from Dr. <NAME> of the orthopedics department actually:*
2	P: hai	*P: yes*
3	D: ee to: kyou wa dou itta koto de okonatte kudasai te iu fuu ni iwaretemashita	*D: um a:nd today what kind of thing if you could eexplain to me were you told*
4	P: toku ni kiitemasen	*P: I didn't hear anything particular*
5	D: A↑ TOKU NI KIITEMASEN↓ [A (.) sou desu ka]	*D: Oh? YOU DIDN'T HEAR ANYTHING IN PARTICULAR↓* [oh (.) is that right]
6	P: [ano::]	*P: [we::ll*
7	(1.5)	*(1.5)*
8	P: un: gan no kankei mo te	*P: umm:something to do with cancer*
9	D: ee	*D: yes*
10	P: ano: (1.0) ichiou dai ichi naika no hou ni kakatte moratte: hai ga douno kouno tte ittemashita	*P: well: (1.0) basically I was asked to consult the first department of internal medicine: my lungs were something or other*

		they told me
11	D: aa sou desu ka (.) hai ga donna kanji ka tte koto wa kiitemasen ka	*D: ah is that so (.) what kind of thing did you hear about your lungs*
12	P: °kuwashiku wa kiite nai desu°	*P: °I didn't hear it in detail°*
13	D: <laughing> hh ha: sou desu ka (1.0) wakari=	*D: <laughing> hh ha: is that so (0.1) I under=*
14	P: =itta no kamo shirenai n desu kedo	*P: =they probably told me but*
15	D: aa: sou desu ka (.) nanka o tegami desu to: ano: shashin no hou de: ano: sukoshi kage ga aru to iu youna katachi de: kakareteru n desu ga	*D: ah: is that so (.) actually the (honorific) letter is um: well: about the x-ray: there is a slight shadow kind of shaped thing: although it's hidden actually*
16	P: zenzen kiitenai desu	*P: I didn't hear anything about this*
17	D: aa sou desu ka: a: shashin to iimasu ka: nanka ano: hai no byouki de: to iu mono ga arun desu kedo: maa sore ga aru ka dou ka wo shirabete kudasai to iu katachi de kakareteru n desu [kedo ne]	*D: ah is that right: ah: how shall I say well: a lung disease: there is something we might call (that) actually: we:ll check whether there is or not that's the kind of thing they've asked you to consult us [actually]*
18	P: [ano] (2.0) kage ga aru to wa kiitenai kedo: sono [hai no wo shiraberu to]	*P: [umm] (2.0) I didn't hear that there is a shadow actually: that [lung's investigate]*
19	D: [aa sou desu ka] hai: wakarimashita (1.0) kokyuu kinou no kensa no kekka ni tsuite toka nani mo iwaretemasen: ka↓ (1.0)	*D: [oh is that right] yes: I see (.) you didn't hear anything about the results of a breathing function check ↓ (1.0)*
	⇩ ⇩ ⇩	⇩ ⇩ ⇩
48	D: shinsatsu (.) to iu koto ni nattan da to: omo (.) omoimasu (.) hai (0.9) wakarimashita ↑ima toku ni hai no hou ni tsuite nani ka shimpaina koto wa arimasu ka	*D: a medical examination (.) so-called was carried out I: thi (.) think (.) right (0.9) I understand ↑now especially, have you had any problem connected with your lungs*

(#43 P=M50; D=A7F)

The female JD has a referral letter from orthopedics, indicating possible lung cancer, which she begins recapping to the patient at the start of the consultation. The doctor asks the patient what he already knows, but at first, the impression is that the patient has not heard much from the referring doctor. After the patient says he does not know much about why he is here (line 4 – "I didn't hear anything particular"), the doctor gets nervous (indicated by giggles), and tries to determine just how much he has already been told. Her immediate reaction in line 5 is to repeat "Eh? You didn't hear anything in particular?" (perhaps she has given too much information too early, and fears she might find herself in a position where she has to explain some bad news to the patient – what exactly does the patient know about the reason for her referral?). This prompts the patient to take the next turn with ano:: ('well::') in overlap, resulting in the long pause (1.5 secs) in line 7, then he continues with "um, er, they said it had something to do with cancer". The doctor backchannels, then the patient gives more, albeit vague, or even evasive, information in 10, resulting in a call for clarification from the doctor in 11, which the patient is unable to help her with. The doctor's response is embarrassed laughter while she decides her next move. The patient's response in 14 may be an attempt to take some responsibility and mollify the doctor's embarrassment in 14 ('I was probably told') giving the doctor time to recover, and explain about the contents of the letter

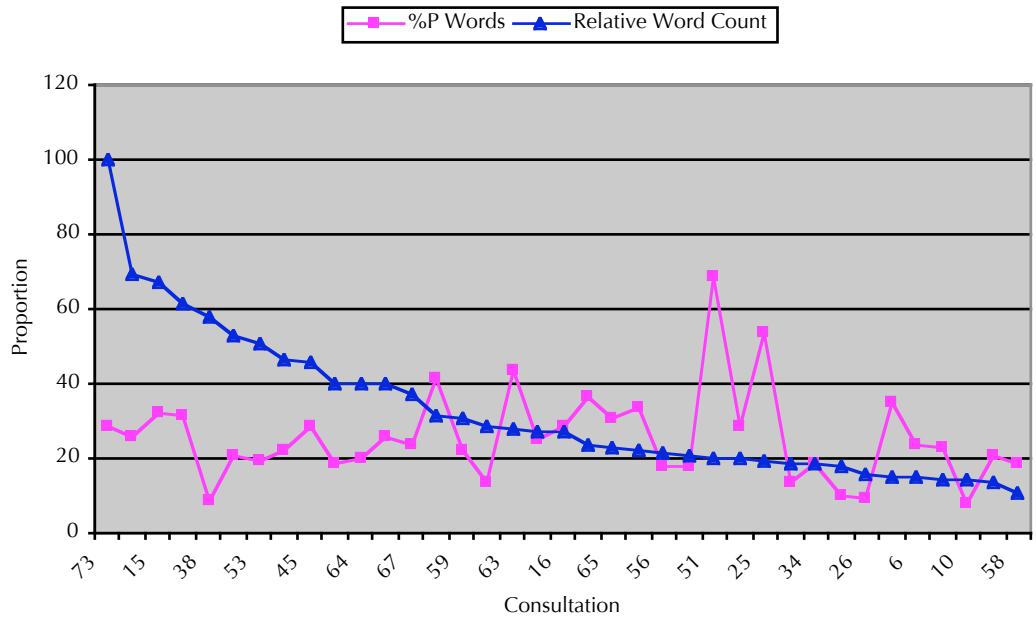
of referral to the patient – a shadow has shown up on a lung X-ray. But, it turns out that the patient is not aware of this, so during the next four turns the doctor establishes what the patient knows. This sequence ends with wakarimashita (topic transition marker, see §4.2.1) after which the doctor proceeds to explain the information she has, including showing where the shadow is on the x-ray picture itself. During this phase, which extends over twenty-nine turns the patient is mainly backchannelling and the doctor is making long utterances. At the end of this sequence, there is another topic switch signal, wakarimashita, then the doctor steers back towards history-taking mode, asking about possible lung related problems, (5 turns), a 7 second pause where she writes notes, then the next phase, which is about the patient's previous illnesses. After this point the consultation follows the usual JD routine.

We can see, therefore, that the much higher proportion of doctor talking time in #43 compared to the other JD consultations, can be explained by the early disruption to the usual routine, in which the doctor moves from interviewer to teacher, and gives this JD consultation an aspect of an SD consultation, where the main information giver is the doctor, not the patient.

Regarding the proportion of patient's words uttered in the SD consultations, shorter consultations would be expected to have proportionately less doctor talking time – not because the patient would talk more, but because the explanations by the doctor would be much shorter. Therefore, in general little input was expected from the patient, as the phases that mainly constituted the SD consultations largely involved explanations from the doctor with the patient backchannelling and sometimes calling for clarification; the main variable would be whether the doctor had more or less explaining to do. Conversely, longer consultations should show proportionately more input by the doctor, even if the patient was prompting him with more calls for clarification than average. So the trend should be the reverse of what I expected in the JD consultations.

In fact, Figure 6.5 shows many peaks and troughs, roughly between the 45th percentile and the 10th percentile, but it is difficult to see any correlation between the length of the consultation and the proportion of words uttered by the patient. However, on closer inspection it can be seen that there is a slight trend in that many of the higher peaks come in the middle section of the line, which means that the very longest consultations and the very shortest consultations have proportionately less patient input than those of medium length.

Figure 6.5: Proportion of patient's speech according to consultation length (SD)



Again, this can be confirmed by looking at the means for different sections of the line %P words:

- Top third mean (Longest 12 consultations; Range = 4821-1912 words): 23.37% of talk is by P
- Middle third mean (Middle 13 consultations; Range = 1797-961 words): 30.94% of talk is by P
- Bottom third mean (Shortest 12 Consultations; Range = 957-520 words): 21.84% of talk is by P
- Top half mean (Longest 18 consultations; Range = 4821-1324 words): 24.97% of talk is by P
- Bottom half mean (shortest 19 consultations; Range = 1309-520 words): 26.06% of talk is by P

There are two very high peaks in the line, caused by #51 and #25. As I mentioned in §4.4 #51 is unusual in that the patient only sees this senior doctor, and he carries out the whole consultation, including the history-taking phases, which are mainly absent from the other SD data. Also, at the end of this consultation, a nurse makes a brief appearance. #25 is also a preliminary interview that is carried out by a senior doctor, although this one does not proceed to a prescriptive phase as does #51. Instead, after the history-taking phase the doctor makes a brief physical examination just before the closing phase. After this the patient goes off for a blood test after the consultation, and when she returns she is seen by this same SD in #28. Therefore, since these two consultations involve a history-taking phase, it is not surprising that the patients have relatively more speaking time as they give their narratives.

In #51 the patient's words account for 58.5% of all words spoken (715 out of 1223). He is not a referral, but he has been to another hospital before and he has a long story to tell about this, constituting phase 2 of my consultation scheme. This narrative story accounts for

just under a third of the total number words of this consultation (374/1223 words) and exactly one third of the total number of turns (64/200 turns), during the course of which the doctor is mainly backchannelling. At the start of this phase, the doctor guides the patient into the story, co-constructing the narrative, after which the doctor sits back and allows the patient to proceed through backchannelling:

1	D: To (.) shinsatsu no mae ni (.) chotto ohanashi no hou ukaga[i:]	*D: and (.) before the medical check (.) you story I just want to he [a:]*
2	P: [Hai]	*P: [yes]*
3	D: masu (.) ee to sakunen no kugatsu ni (.)	*D: ar (.) and um in September last year (.)*
4	P: Kaze ga ne (.) sankagetsu.	*P: a cold right (.) three months*
5	D: Sugoi haien o [okoshite]	*D: very bad pneumonia [you got]*
6	P: [Mou ninen mae] desu ne.	*P: [already two years before] that was right*
7	D: Ninen mae?	*D: two years before*
8	P: ee.	*P: yes*
9	D: A (.) heisei juuichinen desu ne	*D: ah (.) the twelfth year of the Heisei Period[34] right*
10	P: ee.	*P: yes*
11	D: a sou de [su ka.]	*D: ah is th[at right]*
12	P: [ee]	*P: [yes]*
13	D: kore wa ittan yoku nattan desu ne	*D: as for this you say it got better right*
14	P: ee sou (.) ano: (.) hai ni mizu tamarimashite ne:	*P: yes that's right (.) um: (.) water accumulated in my lungs ri:ght*
15	D: ee	*D: yes*
16	P: shite (.) nishuukan (.) soshite sankagetsu nyuuin shite (.)	*P: then (.) two weeks (.) after that I was in hospital for three months*
17	D: un	*D: uhu*
18	P: Taiin shitandesu yo.	*P: I was discharged you see*
19	D: ee.	*D: yes*

(#51 P=M81; D=B1M)

After this, until the end of this phase the doctor is mainly backchannelling (21 out of 25 doctor turns from line 15 are backchannels; the other four are short calls for clarification). This phase ends with a ten second pause. Next, phase 3 – checking and clarifying the story – is more evenly balanced regarding the speech input between the two participants (15 turns each, P = 103 words (58%), D = 73 words (42%)). After this, the rest of history-taking (phase 4) takes up 84 turns (42 turns each, D = 192 words (40%), P = 284 (60%)). After this there is a brief 6 turn sequence where the doctor explains to the patient that he will have to have a breathing test, during which the patient only backchannels (D = 41 words; P = 4 words). This is followed by an eight turn sequence where a nurse (who appears to have been in the consultation room all along but has not spoken until now) asks if the patient has had this kind of test before (P = 36 words (60%); Nurse = 24 words (40%)). Then the doctor talks by phone to the department where the breathing test will be given (28 words), after which he gives more instructions to the nurse (27 words), who backchannels twice.

[34] This corresponds to the year 2000 in the Western calendar.

6.3.3 Patient age as a factor in the amount of patient talk

There are many variables that might have an effect on the overall word count of the JD consultations and the ratio of doctor: patient talk. The most obvious factors are the (nature and complexity) of the presenting illness, the (amount, nature and complexity) of the patient's previous illnesses, the (relevance of the) family's medical history and the patient's age. To a certain degree, the effect of the type of illness as a variable had already been mitigated by my decision to record data from this particular department in this particular hospital, whether the patient had been referred by another doctor, and the boundaries of each consultation (especially the history-taking consultations) because of the specific nature of this institutional setting (especially the fact that this department was specialised in a particular area), and the standardisation of the procedure.

Next, I analysed the influence of patient age on the amount of patient talk to determine if there was any correlation with either the length of the consultation or the proportion of patient talk. Ohtaki, in explaining the reason for so much 'social talk' suggested one reason might be that the institutional setting of her study – a rural community clinic – had a lot of older patients, and "elderly Japanese are much more talkative than the youth, once they feel relaxed" (Ohtaki 2004). Also, one of my transcribers in a comment on how the patient in #3 (63 year old male) was dominating the history-taking session by 'proudly talking about his illnesses' to the young JD made a similar comment that older people tend to like talking about themselves. I was interested to see whether the Japanese data would give any support to this view, which seems to have wide currency in Japanese society, so having carried out the statistical analysis on the proportion of patient talk as described above, I re-sorted the data according to patient age, producing two more charts - one for the SD consultations and one for the JD consultations (fig 6.4 & 6.5) - and a summary of mean scores by three age groups; young, middle-aged and old (Table 6.3).

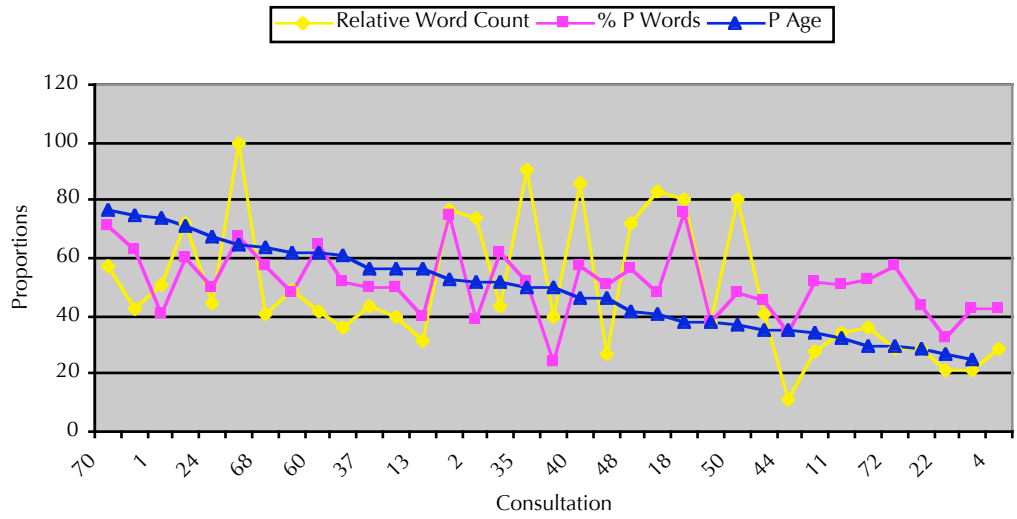
Table 6.6 shows that older patients in the JD consultations utter a slightly higher proportion of the total words (57%) than younger and middle-aged patients, who have very similar means (47% and 50%). However, looking at the overall word counts for the JD consultations, a very different picture emerges. The age group that produces the wordiest

Table 6.6: Word counts according to 3 age groups

	JD			SD		
Age Group *(No. of consults)*	**Over 60** *(9)*	**40-59** *(13)*	**Under 40** *(13)*	**Over 60** *(10)*	**40-59** *(13)*	**Under 40** *(14)*
%P words Mean	57	50.3	47	30	24	23.7
St.Dv.	*9.78*	*12.72*	*11.14*	*16.26*	*10.88*	*9.99*
Word count Mean	54	60	32	42.8	26.3	32.3
St.Dv	*19.32*	*23.28*	*20.79*	*26.54*	*10.94*	*17.68*

conversations is the middle-aged group; the mean is almost double the length of the younger patients, and 6 points higher than the older patients. This can be seen quite clearly in Figure 6.6 by the concentration of high yellow peaks in the middle of the graph, and the relatively low flat section of the yellow line on the right hand side of the graph. So while there is a slight trend for older patients to talk more, there is an even bigger trend for conversations involving middle-aged patients to have more words on aggregate (i.e. both patient and doctor are talking more in these consultations).

Figure 6.6: Relative word count by Patient age (JD)



What could explain this trend? One possibility is that middle-aged patients are more assertive, or more willing to express their worries, and this could result in the doctor having to work harder both to direct the patient to give the information he needs and to explain his questions to the patient. This seems to be the case in #2, which has a score of 73%.

The patient in #2, a woman in her early fifties, is getting increasing unhappy in the preliminary consultation with bright young doctor A5. She has been referred to the university hospital because of her chronic bronchitis, and she's clearly in a bad way as her intermittent coughing fits throughout the consultation testify. In this conversation, the young doctor has a noticeable Kansai[35] dialect. Given their relative institutional roles he overuses formal Japanese, and he sometimes misuses honorific and polite forms, as can be seen in the first sequence below. This seems to influence the patient in the early part of the conversation, as she responds to him using polite forms. However, her language gets more informal as the conversation goes along but the doctor keeps on with his overuse of polite terms. For example, in the following sequence towards the end of the consultation, family history phase,

[35] A general dialect from the mid-West of Japan, encompassing Osaka, Kyoto, Nara and Hyogo prefectures)

the doctor utters gomennasai ne (informal) after having awkwardly used a rather obscure and mechanical phrase 'direct blood line' to ask about her relatives when he knows he should have used a more familiar word ('relative' line 3).

1	D: chokkei to [iu ka]	*D: direct line [so-called]*
2	P: [A (.) A (.) Ah]	*P: [oh (.) oh (.) ooh]*
3	D: chi no tsunagatta kata (.) un (.) ano (.) gomennasai ne↓ ato (.) gokazoku de toku ni byouki wo omochi no kata wa↑	*D: people connected by blood (.) um (.) well (.) sorry . next (.) of your honourable family is there anyone what has aparticular illnesss?*
4	P: <cough> iya (.) byouki motteru (.) choujo↓	*P: <cough> no (.) having an illness (.) my eldest sister*
5	D: ee↓	*D:yes*
6	P: ga (.) tounyou↓	*P: has (.) diabetes*
7	D: ee (.) ato wa (.) irasshaimasu↑	*D: yes (.) apart from that (.) is there anyone else?*
8	P: ato wa (.) nai to omoun desu kedo ne↓	*P: apart from that (.) there isn't anyone I think actually.*
9	D: sou desu ka	*D: is that right*
10	P: hai	*P: yes*
11	D: suimasen (.) gokekkon wa [sareteiru]	*D: excuse me (.) as for marriage (*honorific*) [have you done this] (*respect form*)*
12	P: [iya] shitenai desu↓	*P: [no] I haven't*

(#2 P=F52; D=A5M)

The doctor also uses suimasen (*excuse me*) before asking if the patient is married, which is inappropriate because this question is a standard part of the history-taking process, and the institutional status of the doctor would allow him to ask it without the need for hedging.

In the following sequence, earlier in the same consultation the doctor uses o tabako, but the honorific o is over-polite – he seems to be unsure of the appropriate register – opting for a form that might be more suitable in a service encounter when the assistant wants to show respect (positive politeness) to the customer[36]. In the following extract, the patient responds without the honorific. Possibly she is picking up on the doctor's uncertain control of polite forms, or because the age difference between them allows her to reduce the power asymmetry:

1	P: <cough cough>	*P: cough cough*
2	D: (.) donna kanji no apahto desu atarashii desu ka (.) soretomo warito furui kanji?	*D: (.) what kind of apartment is it a new one? (.) or rather kind of old?*
3	P: iya (.) atarashiku mo naku (.) sonna ni furuku mo naku (.) juu ni san nen gurai deshou ka ne (.) un (.) un <cough (.) cough (.) clears throat (.) [cough]>	*P: ah nope (.) not so new (.) also it's not so old (.) about twelve or thirteen years would it be (.) um (.) um (cough cough clears throat [cough])*
4	D: [tatoeba ne] ouchi de (.) osouji toka desu ne (.) sorekara (.) maa oshiire hikkurikaeshita toka (.) futon wo dashitari toka (.) sou iu koto ni hidoku nari toka desu ne (.) [sou iu koto wa arimasen]	*D: [for example] in your house (.) when you do the cleaning (.) or (.) well when the closet is turned over and so on (.) when you put out the futons and so on (.) that kind of thing it becomes bad (.) [is there anything like that?]*
5	P: [arimasu]	*P: [there is]*

[36] This is also noticeable with this doctor in #1, #4, # 3, #35, and with a different doctor in #40.

6	D: [yappari]	*D: [I thought so]*
7	P: [hokori (.)] un_	*P: [dust (.)] um*

(#2 P=F52; D=A5M)

In the next extract from the same consultation the doctor is having trouble getting information about the patient's smoking:

1	D: <name> san (.) ano otabako toka dou desu ka	*D: Mrs. <name> (.) um: cigarettes things like that how about that*
2	P: iya izen wa [ne]	*P: no (.) before [you know]*
3	D: [ee]	*D: [yes]*
4	P: suttetan desu kedo ne	*P: I smoked actually right*
5	D: ee	*D: yes*
6	P: mou koko (.) go nen gurai wa	*P: already here (now) (.) about five years*
7	D: ee	*D: yes*
8	P: sutte nai desu ne	*P: I don't smoke you know*
9	D: ee (.) izen wa doregurai suttemashita?	*D: yes (.) speaking of before about how much did you smoke*
10	P: ya (.) sonnani ne ooku uhm (.) juppon gurai?	*P: no (.) not you know that much um (.) about ten*
11	D: juppon gurai	*D: about ten*
12	P: un	*P: mm*
13	D: nan nen gurai (.) tsuzuketan desu ka?	***D: How long (.) did you continue for?***
14	(26.0) <voices coming from next door booth>	*(26.0) <voices coming from next door booth>*
15	D: un: yappari ichi nen ni nen to iu to ne (.)	*D: um: after all is said and done if you say one year two years you know:*
16	P: un	*P: uhu*
17	D: sonna ni ooi ka na: to iu kanji wa shinain desu kedomo:	*D: that's kind of not so much: actually:*
18	P: aa	*P: mm:*
19	D: yappari [juu nen]	*D: okay then [ten years]*
20	P: [un]	*P: [mm]*
21	D: nijuu nen tsuzukeraretta tte iu to (.) daibu chigaimasu kara ne dou deshou	*D: if you say you had continued twenty years (.) it 's quite different you know (.) what would you say?.*
22	P: (1.0) un: (1.0) juu nen gurai wa sutta kamoshirenai ne sono gurai wa un	*P: (1.0) mm: (1.0) about 10 years I smoked perhaps you know (.) about that mm*
23	D: juu nen gurai desu [ka]	*D: about ten years [is it]*
24	P: [un]	*P: [yeah]*
25	D: sou desu ka (0.8)	*D: I see (0.8)*

(#2 P=F52; D=A5M)

The doctor needs to get an accurate number to make the history complete, but the patient does not want to give him an answer. Note the enormous 26-second pause after the doctor's question about how long she used to smoke in line 13. Getting no response from her in what must have been a very tense half-minute - a battle of wills - the doctor resorts to three different attempts to get an answer from her by suggesting an increasing series of numbers. The basis for his approach would seem to be that confirming or denying a closed leading question is easier than answering an open question (lines 15-21). His last suggestion in line 21 is elaborated by rationalising his thoughts out loud, and he finally breaks through her truculence to get the information he needs in line 22, which she confirms in 24 with a minimal grunt, allowing him to bring the sequence to a close.

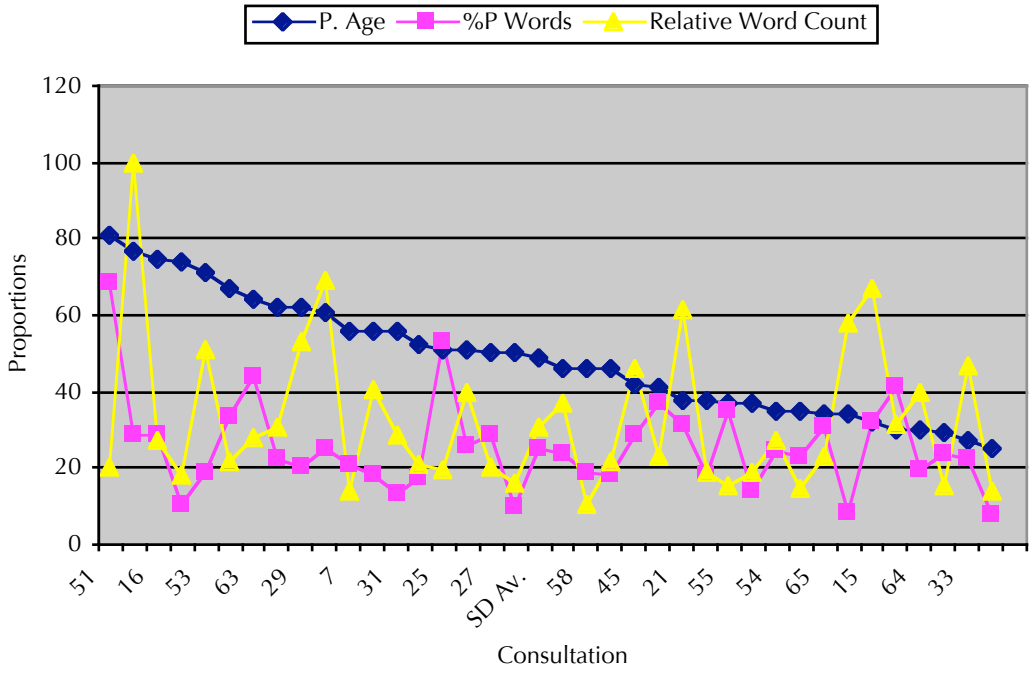
This is only one example of assertiveness from one middle-aged patient, but it does

show how the relative ages of doctor and patient can have an effect on the power dynamic and it might go some way to explaining the data in table 6.6 regarding the JD consultations.

Age factors in SD Consultations

From Figure 6.7 (SD consultations) it is difficult to see any clear relationship between patient age and the amount of talking time either overall or by the proportion speech by the patient. The peaks and troughs seem to be fairly random, showing equal extremes across all age groups. While the older patient in #51 (in fact at 81 years old he is the oldest

Figure 6.7: Relative word count by Patient age (SD)



patient in the Japanese data) has the most talking time of all the patients, in this consultation the SD takes the complete history of the patient (there is no JD consultation with this patient), other older patients do not match this level of speaking activity, and there are many younger and middle-aged patients who have relatively high scores. However, calculating the means for age groups (Table 6.7) reveals that in fact there is a slight correlation between the patient's age and the proportion of words spoken by the patient (%P words): the mean for older patients (30%) is higher than the means for middle-aged and younger patients, which are almost identical (24%). Regarding the relative word count, age seems to be correlated even more strongly, but in a different way: the mean for the consultations involving the older patients (42.8) is once again higher than the means for the other two age groups, but this time the younger patient mean (32) is higher than that of the middle-aged patients (26).

Therefore, through this limited data, it can be seen that there is a tendency for SD consultations with older patients to have more speech by both participants, and the greater

proportion of the extra speech input is coming from the patient, not the doctor. Why is this? One possibility to account for the higher overall word count in the longer consultations is that the doctor is more careful to give careful explanations to older patients than younger patients, so these explanations would take longer and involve more rephrasing, checking and more examples.

6.4 Explaining the Diagnosis – Accommodating the Patient

In this section I look at another way in which the doctor can achieve a more patient-centred consultation: the way the doctor explains medical information to the patient, and how he/she allows the patient to call for clarification about this information. I focus on the senior doctor's explanations and the way he verbalises his deductive reasoning by considering the medical evidence that has been collected about the patient so far (phase 6 – consideration of the patient's condition). As the doctor explains and interprets this medical information he repeats words and rephrases technical terms in order to signal the importance he attaches to both elucidating and giving the information, and this signals his understanding of the patient's expectations.

Explaining an X-ray

The following sequence from consultation #5, in which the doctor explains an X-ray of the nose and throat, shows careful explanation by the doctor, and backchannelling by the patient almost as punctuations to his speech. This is the start of a long stretch of 58 turns, throughout which the patient's utterances are only backchannels. These backchannels are always easily audible during this section of the recording, but though they alternate between very loud and quiet as the conversation goes on, they remain very distinct and clear right to the end.

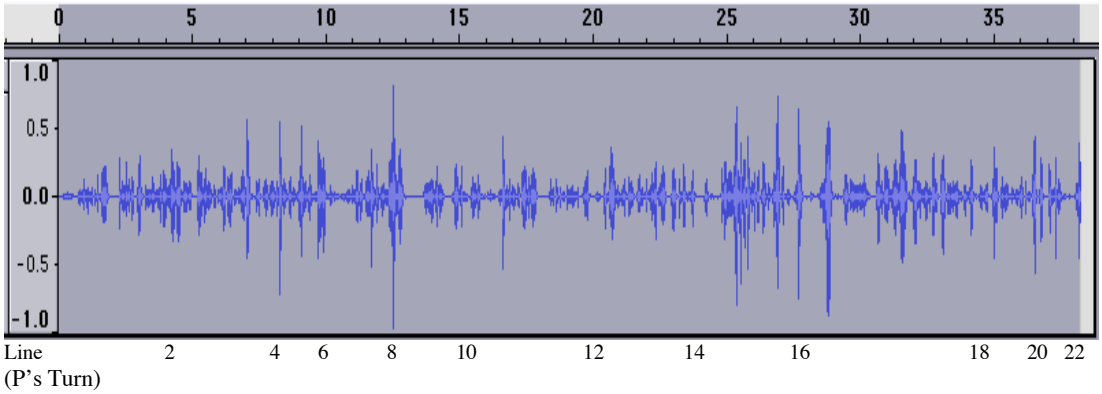
1	D: oto wo miru tokoro (.) ibiki wo kaki yasui toka ja nai n desu ne:	*D: the place you see the sound (.) you see it's easy to cause snoring*
2	P: aa sou desu ka	*P: oh? right?*
3	D: ee (.) ano (.) ibiki wo kaku hou tte iu no wa maa (.) nodo ga=	*D: yes (.) um (.) you say your snoring (.) well (.) your throat is like=*
4	P: =hai=	*P: =yes=*
5	D: =kou (.) semaku mierun desu ne	*D: =looks narrow doesn't it*
6	P: hai hai	*P: yes yes*
7	D: hakattara (.) sonna kanji dewa nain desu kedo mo=	*D: if we measure it (.) not that much though*
8	P: **=HAI=**	*P: =**YES**=*
9	D: =tada (0.8) ano: yappari (.) tsukaretan desu ne	*D: =only (0.8) um: you're obviously (.) tired aren't you*
10	P: hai(0.7)	*P: yes*
11	D: fukaku nemuru to donata mo (0.5) ibiki wo (kaku) toki wa kakimasu	*D: (0.7) during deep sleep everyone (0.5) when we snore it happens*

12	P: hai	*P: yes*
13	D: mondai wa (.) sono toki (.) hontou ni kokyuu ga tomatteite ne	*D: the problem is (.) at that time (.) it's stopping you breathing right*
14	P: hai	*P: yes*
15	D: tomatteru to (.) dandan dandan sanso ga sagatte iku n desu yo	*D: once it stops (.) gradually the oxygen (level) goes down you see (.)*
16	P: **HAI**	*P: **YES***
17	D: (.) sore ga ano (.) karada ni eikyou wo azukaeru gurai na no ka (.) sou dewa nai no ka	*D: (.) that um (.) has a big influence on your body (.) isn't that so?*
18	P: hai (.)	*P: yes (.)*
19	D: sore ni yotte chiryou suru hitsuyou ga aru no ka dou ka	*D: because of that we can see if treatment is needed or not*
20	P: hai	*P: yes*
21	D: a. handan suru n desu ne	*D: a- we'll have to decide*
22	P: hai	*P: yes*

(#5 P=F74; D=B5M)

The sound wave diagram of this section of the recording (Figure 6.8) shows the peaks where the patient backchannels. The louder '<u>hai</u>'s, represented in the transcript by **BOLD CAPITALS**, and in the wave diagram by the longer peaks are clearly visible: lines 8 and 16.

Figure 6.8: Backchanneling in Consultation #5 (For sound listen to Appendix 18)



There are very few pauses between the participants, and there is a lot of latching, but not quite overlap. In this sequence the doctor uses the X-ray to show the patient the physical problem in her body (the narrowing of the throat) and the picture makes concrete what might otherwise be abstract. He presents the image of the throat, trying to give it meaning by explaining how the narrowing manifests itself physically through the snoring, which she has already told him about. In this way he brings her evidence to bear to give support to the analysis he now presents, and thereby gives it more weight. He's bringing her along with him, using his interpretation of the data to lead her towards the diagnosis. As he nudges her down this path he confirms that she sees the same evidence as he does and has the same interpretation of this evidence as he does by checking for clarification (line 5):

kou (.) semaku mierun desu ne

You can see it's narrow, can't you

and later an empathetic leading question (line 9):

yappari (.) tsukaretan desu ne

You're obviously tired aren't you?

These statements emphasize his position as expert, gaining her trust, which he needs when he moves to the next stage of this sequence and begins the discussion of treatment options (line 19):

sore ni yotte chiryou suru hitsuyou ga aru no ka dou ka

because of that we can see if treatment is needed or not

So the doctor's careful and methodical explanation of the visual evidence serves to 'reconcile the life world and the world of medicine' (Larsen et al 1997: 298) gaining the patient's trust and get her to follow his treatment plan by presenting his description and interpretation of the data as the inevitable one. Heritage writes that doctors use more authoritative language when they explain results that will affect their diagnosis, but they are less authoritative when the results are not so clearly related to the diagnosis (Heritage 2005). He argues that the more they need to account for their diagnosis, the more authoritative they want to sound when giving evidence that will lead up to it diagnosis. In the above sequence it would appear that this doctor shows his expertise with this careful explanation.

Long Explanations By The Japanese Senior Doctors

The above sequence is typical of the kind of explanation that can be seen during phase 6 of the SD consultations. In these sequences the doctor talks for a long time (on average the SD doctor's talk accounts for 74.13% of the SD consultations) presenting detailed information with little or no verbal input by the patient. However, these sequences are rare among the JD consultations (Table 6.7).

Table 6.7: Consultations with most long turns (over 40 words) by the doctor

Consultation	Doctor	No. of long turns	Total turns	Total words	Mean Turn Length
46	B4	21	253	2956	11.7
21	B6	18	165	2871	17.4
73	B2	17	518	4534	5.4
38	B2	16	226	2526	11.2
53	B1	13	303	2691	8.9
8	B5	11	177	18936	10.9
45	B4	10	195	2035	10.4
64	B4	10	248	2145	8.6
31	B1	6	134	1182	8.8
43	A7	5	169	1218	7.2
56	B1	5	102	944	9.3
10	B5	4	53	10599	11.3
26	B1	4	52	618	11.9

Mean scores

	JD Mean (StDv)	SD Mean (StDv)
%D Words	48.29 (11.49)	74.13 (12.34)
Word Count	1734.57 (796.78)	1584.27 (973.97)

The 200 longest turns in the Japanese data were ranked according to word count. This table ranks consultations according to how many of those 200 longest turns they have. Therefore, of the longest 200 turns across the data, 21 of them appear in #46, 18 of them appear in #21, 17 of them appear in #17, and so on. As can be seen from the table, only one JD consultation appears in the top 13. A more comprehensive breakdown of turn-length is presented in Appendix 17

During the senior doctor's explanation sequences, what little input there is comes in the form of short backchannels (and no doubt these verbal backchannels would be mirrored or complemented by non-verbal backchannels, which would have been apparent in video recordings). These long utterances by the senior doctors are usually part of the internal summary, which is 'an explicit verbal summary of the information gathered so far […] ensuring accuracy in the consultation and facilitating the patient's further responses' (Silverman et al 2005: 84-5). The authors provide a list of advantages of internal summaries for the patient (e.g. it shows the doctor has been listening, it allows the patient to check the doctor's understanding, it invites the patient to go further in explaining his/her problems, it shows the doctor's interest in the illness (the patient's focus) as well as the disease (the medical focus)) and for the doctor (e.g. checking for accuracy, ordering his/her thoughts, helps to recall information later) (ibid: 85).

Larsen et al (1997) comment that by summarizing the information from the patient the doctor can be sure she has all the details necessary to understand the patent's model (i.e. The patient's understanding of his/her symptoms and the course of events so far) before 'contaminating' with her own ideas. They also talk of the doctor checking to make sure the patient is able to 'meta-communicate' – comment on the way something is expressed – so the doctor can check to make sure they are both speaking the same language if misunderstandings occur during the consultation. Another function of the summary is to translate the 'life world' explanation of the patient into the 'world of medicine' in order to move on to the next stage, which is to develop a diagnosis, adding information from the clinical examination to her understanding of the patient's history (see Larsen et al's explanation of these terms (ibid: 298)).

6.5 Emergence of the patient's voice

So far we have seen that patient-centredness is achieved by the doctor through his/her own backchanneling behaviour, encouraging longer explanations from the patient (§6.2), and through his/her own explanations to the patient, being sensitive to the patient's backchannelling through rephrases and repairs (§6.3). Another aspect of patient-centredness

is creating an atmosphere in which the patient feels willing or comfortable to ask for clarification or to express some worry that he/she has about the prognosis or the proposed treatment plan. In this section, I begin by looking at how the patient's voice emerges through calls for clarification during the consultation, after which I focus on patient initiated insertion sequences in the closing phase.

6.5.1 Questioning by the patient

In one or two of the consultations where a high proportion of the questions are by the patient, the total number of questions is also high (Appendices 12 and 5.2 give the number of questions by patient (PQ) and the proportion of patient's turns that were questions (%PQs) for #46, #21 and #73). In #46 there were 15 questions from the patient, out of a total of 120 utterances (43 of these (36%) were backchannels). In many of these questions the patient was checking his understanding of the doctor's explanations about his condition (gall stones) or asking for more details about further tests. For example, in the sequence I showed in §4.3.1, the patient asks for more information about the procedure that the doctor will perform later that day (an endoscopy):

1	D: maa (.) ABC ga (.) sugu ni haireru yo deshitara tonan ni haitte (.) sate chiryou shite moratte mo ii mo shinai desu ne	*D: well (.) ABC hospital (.) you can quickly be admitted you know if you were to go in (.) well you can have the treatment or not you see*
2	P: sore desu nee (.)	*P: also you know (.)*
3	D: ee	*D: yes*
4	P: ma (.) ee kyou maa saikensa onegai suru n de (.) onegai shitain desu ke domo (.) ABC byouin dewa hanashita dake de (.) nani mo shite nain desu yo (.)	P: well (.) um today well I'd like a re-examination actually (.) I'd like to do that actually (.) at ABC Hospital I only talked they didn't do anything you know (.)
5	D: ho:	*D: oh:*
6	P: tatoeba isshi desu ne: kiita dake na mon desu kara	*P: for example, the doctor right (.) I only listened kind of thing actually*
7	D: ee	*D: yes*
8	P: dou iu koto na no ka ma (.) (…) de itadaite desu ne	*P: what kind of thing well (.) (…) I was given*
9	D: naruhodo	*D: indeed*
10	P: sore de kyou wa asa shokuji shinai de (..hijou..) kitan desu kedo:	*P: also today without eating breakfast urgently I came you see:*
11	D: ee (1.0) sou desu ka	D: yes (1.0) is that so
12	P: hanashi dake na mon desu kara ne	*P: only regarding talking you see right (.)*
13	D: chotto kiyou to omimasu desu ne:=	*D: just cut it (I) think isn't that ri:ght*
14	P: =ee::: (.) shujutsu wa (.) ma chotto shujutsu wa (..chuusha..) shimasen yo to (.)	*P: ye:::s (.) as for the operation (.) well just as for the operation (..injection..) they don't do right and (.)*
15	D: ee	*D: yes*
16	P: ano: (.) ikamera wo nonde (.) kantan ni toremasu yo (.) to yu fuuni wa kiiteirun desu	*P: um: (.) I swallow the stomach camera (.) it can easily be taken out right (.) that's the way I heard it*
17	D: un: (1.0) sou desu ne (.) ima chotto kantan ni (.) e kakimasu kedo	*D: hm: (.) well (.) now just quickly (.) I'll draw a picture <for you>*

(#46 P=M61; D=B4M)

The question itself comes in line 8 (although one or two words in the second part of this turn after the question are unclear, the actual question is clear enough), but this is

prefaced by his turns in lines 2, 4 and 6, and he explains his reasons for asking the question (his anxiety) in more detail in his next four turns in lines 10, 12, 14 and 16. In the question, there is no pause between the question marker ka and the following utterance, the hesitation marker ma, which keeps the turn and signals that he wants to continue. As for the doctor, until this point he has been explaining the pros and cons of having the procedure at the patient's previous hospital (denoted as 'ABC' in line 1), but from the patient's topic change in line 2 (6 minutes and 48 seconds into the consultation) the doctor switches to backchannelling until line 17, after which he draws a diagram (45 seconds), then gives a detailed explanation about the relevant anatomy and the nature of the illness itself (gallstones) using this diagram, while the patient backchannels (3 mins, 15 secs). After this, the patient asks a series of questions clarifying his understanding of the information, to which the doctor gives detailed answers (5 mins 25 secs):

(i) Call for clarification

1	P: de (.) koko no (.) koko wa ichi senchi tte iu no wa (.) ideguchi wa semai n desu ne?	*P: and (.) this here (.) as for here you said it's one centimeter (.) the entrance to the stomach is narrow isn't it?*

Even though I label this as a call for clarification, in line 16 above the patient has already expressed concern about how easy the camera will be to take out, so it would be possible for us (and the doctor) to understand the pragmatic force of this question as expressing concern about this.

(ii) Call for clarification (repair)

1	D: go miri ijou no ishi no naru to (.) ano kou (.) deguchi dake (.) sou desu ne (.) hikkakatte.	*D: stones that become more than 5 millimeters and (.) um this (.) only the exit (.) how do I say (.) gets stuck*
2	P: hikkakacchau?	*P: gets stuck?*
3	D: ano (.) hikkakatta toki wa mou (.) oudan no genin ni naru to (.) konohen de ishi ga fuyuu shi te iru bun ni wa zenzen (.)	*D: um (.) it gets stuck when already (.) it becomes a cause of jaundice and (.) in this area the suspended part of the stone is completely (.)*

The patient wants more details about what the doctor means by 'getting stuck'

(iii) Call for reassurance

1	P: fuun (.) ano: shujutsu ja nakute (.) ikamera torimasu yo to (.) da kara shinpai nai desu yo to (.) iwareterun desu kedo mo (.)	*P: hmm (.) um: not the operation (.) taking out the the stomach camera right (.) so don't be worried right you (.) told me but (.)*
2	D: ee	*D: yes*
3	P: kono semai tokoro kara kou (1.0) toreru n desu ka?	*P: from this narrow place in this way (1.0) can it be taken out?*

Again, the cause of the patient's concern is the possibility that the camera will get stuck.

(iv) Asking for more details

1	D: ... geka no sensei de shujutsu shite morau ka tatteimasu ne (.)	*D: …the surgeon will carry out the operation or cut it out right*

2	P: ee (.) shujutsu tsuttara dou narimasu?	*P: yes (.) the surgical process, how do they do it?*

(v) Call for confirmation

1	P: ee (.) ano chotto (.) kono mama (.) ishi motta mama no hou ga [ooi tte]	*P: yes (.) um just (.) that way (.) keeping the stone is [common you say]*
2	D: [sou desu ne] motta mama no hou no hou ga ooi desu ne	*D: [well that's right] keeping the stone is common that's right*
3	P: wa ha aa	*P: ah ahh ahh*

At the end of the explanation the doctor says it might be possible to have the endoscopy today (prompting a confirmation seeking question from the patient:

1	P: de (.) kyou no desu ka?	*P: so (.) today is that right?*

The doctor confirms this might be possible, then he goes out of the room to check whether the endoscopy can be done today. He comes back and announces it can be, in about half an hour's time. The doctor makes a quick physical examination, after which there is a discussion about the next appointment – to be admitted to the hospital for the gallstone operation. After this is the closing phase.

6.5.2 Patient initiated insertion sequences at termination

From the above examples we can see at what stage of the consultation the questions are asked, and the kind of questions that the patient asks. The doctor's lengthy answers to the questions shows his willingness to accommodate the patient, and therefore to recognise the patient's concerns, empathise with him, encourage then reward the patient's participation. I now want to look at how patients take this opportunity to participate in the closing phase of the consultation. Here is a sequence at the start of the closing phase of #47. The patient asks for more details about the forthcoming test: 'What is it called?':

1	D: ja kyou kore de owari ni shimasu ne	*D: we, shall we stop here for today?*
2	P: hai (.) suimasen (.)	*P: yes (.) excuse me (.)*
3	D: hai	*D: yes?*
4	P: a (.) sensei (.)	*P: er (.) doctor (.)*
5	D: hai	*D: yes*
6	P: ano: suimasen daichou tte iu no wa	*P: u:m excuse me when you said large intestine*
7	D: ee	*D: yes*
8	P: kochira ni nyuuin shite (.)	*P: I enter this hospital (.)*
9	D: ee	*D: yes*
10	P: tatoeba ben toka wa (.) nyou wa yatte iru kedo (.) ben wa yatte inai	*P: for example stools (.) you do my urine but (.) you don't do stools*
11	D: uun to a (.) ben sen ketsu no kensa a (.) yattemasu yo	*D: um right er (.) stool blood test er (.) we do that*

(#47 P=F41; D=B4M)

The patient opens up the turn with the pauses and an apology the patient introduces the query with 'suimasen' (excuse me)

Insertion sequences are important indicators not only of how well the patient has understood the outcome of the consultation, but also how confident the patient feels in being able to

express his/her concerns to the doctor. In other words, they are a kind of confirmation that the doctor has succeeded in bringing the patient into the negotiation process though various the various patient-centred strategies discussed by Larsen et al (1997) and Silverman et al (2005). Alternatively it could be that coming so late in the consultation it proves precisely the opposite point, since in some cases the insertion sequence brings in new information that the patient seems to regard as important, but can only now, right at the end of the consultation, bring themselves to address. The pressure to say something now, just before they have to leave the room, finally gives them their voice. Patient initiated insertion sequences after the start of the closing phase occurred in 19% of the JD consultations, and 8% of the SD consultations, compared to JD 31% and SD 12% of doctor initiated insertion sequences.

Patient and doctor switch speaking-listening roles through patient insertion sequence at closing phase

In the following sequence we can see how the speakers switch roles – speaker to listener, through backchannelling:

1	D: ma (.) ima no tokoro mune no oto wa (.)	*D: we (.) right now your chest sounds (.)*
2	P: hai.	*P: yes*
3	D: sugoku kirei desu kedomo ne.	*D: very clear actually*
4	P: hai.	*P: yes*
5	D: ee (.) ichiou tada anata mo haien nai ka douka shinpai darou to omounde.	*D: yes (.) so then you are worried if you have pneumonia or not probably I suppose*
6	P: ee hai.	*P: right yes*
7	D: shashin de ano tashikamete mimasu kara.	*D: so in the photo we can ascertain and see*
8	P: wakarimashita (.) hai. sore to ano: (.)	*P: I understand (.) yes and (.)*
9	D: hai.	*D yes*
10	P: ima (.) sakihodo mo moushi ageta n desu ga (.)	*P: now (.) some time ago you already said (.)*
11	D: hai.	*D: yes*
12	P: anoh chikunou no desu ne (.)	*P: u:m that empyema right (.)*
13	D: eh.	*D yes*
14	P: kusuri o nonde irun desu ga.	*P: I'm taking medicine actually*
15	D: hai.	*D: yes*
16	P: kore wa anoh maa chikunou to ano kikanshien to iu koto de (.)	*P: that is um well empyema and that bronchitis (.)*
17	D: hai.	*D yes*
18	P: shouenzai tekina kusuri o nonde	*P: anti-inflammatory medicine I'm take*
19	D: [hai].	*D: [yes]*
20	P: [iru] no desu ke [domo]	*P: -ing actu[ally]*
21	D: [hai] hai.	*D: [yes] yes*
22	P: ee (.) kyou okusuri wa deru n desu ka	*P: can I get any medicine today?*
23	D: a (.) chotto misete itadakemasu [ka]	*D: oh (.) just can you show it to [me]*
24	P: [hai] kyou motte kimashitan [de]	*P: [yes] I brought it with [me]*
25	D: [eh] a (.) kore ja chotto okarishite [masu]	*D [yes] oh (.) can I just borrow [that]*
26	P: [hai.]	*P: [yes]*
27	D: kondo no shinsatsu no toki kaeshimasu kara (.) ano modotte kite ano setsumei suru toki desu ne	*D: I'll give it back at the next consultation (.) um whenyou come back um when I explain right*
28	P: hai:	*P: yes*
29	D: ma (.) chikunou wa chotto kanari choukikan chiryou wa hitsuyou desu	*D: well (.) as for the empyema just quite a long time will be necessary for it to get*

		cured
30	P: hai	*P: yes*
31	D: nakanaka sugu wa yoku naranai node ne	*D: it won't get better very soon actually*
32	P: hai.	*P: yes*
33	D: hai (.) ja kondo wa machigai naku. [(laugh)]	*D: yes (.) well next time there will be no mistake <laughs>*
34	P: [machigai naku]	*P: [no mistake]*

(#55 P=M37; D=B1M)

During lines 1-8 the patient uses only backchannelling (hai, ee), while the doctor explains the results of the tests; at turn 8 the patient utters the topic close marker wakarimashita, pauses, creating a TRP, which the doctor does not take, the patient self-selects with hai, followed immediately by sore to ano:, which opens a new topic. The doctor acknowledges the topic opening with the backchannel in line 9, allowing the patient to begin his narrative, which the doctor supports and encourages with backchannelling until line 20. The patient ends this turn with desu kedo mo, which is often used to preface a conclusion, a question, or the main point of a story. It is interesting that in turn 21 the doctor responds to this preface with a double backchannel ([hai] hai), which might give extra encouragement to the patient to reveal his point, and emphasise that the next turn is the patient's. So turn 22 is the question – 'can I get the medicine today?', to which the doctor responds, in turn 23, by opening up an insertion sequence – 'ah, can you just show it to me?'. The patient's turn in 24 is the second part of this insertion sequence, which the doctor interrupts in turn 25, asserting his power and thereby ensuring he retains the turn rights. The patient acknowledges this with a backchannel in 26, after which, in 27, the doctor completes the adjacency pair opened up by the patient's question in 22 (saying, in the second part of the utterance that he'll explain everything when the patient comes back, and by implication he'll give the answer to the question as to whether the patient can get some medicine today or not). The patient backchannels, in 28, then in 29 the doctor gives a topic shift signal (ma) opening up the closing sequence, during which the patient backchannels until the end where, in the final turn of this sequence (34) he responds to the doctor's quip and laughter about not making another mistake[37] (33) with a echo confirming he understands.

So why did the patient wait until right at the end of the consultation to bring up this important worry? It must surely have been playing on her mind throughout the rest of the consultation. The introduction of new information by the patient at the closing stage is well known in the medical literature, and experienced GPs in the UK, for example would be prepared for this. First, we may consider three possible interpretations of this:

(i) Procedural reason – The patient did not want to bother the doctor during the

[37] There was a misunderstanding at the beginning of this consultation between the patient and the previous JD, which the participants have to clear up – this is the 'mistake to which B1 is referring. I discuss this misunderstanding in more detail in Chapter 7 §7.4.2.

preceding part of the consultation – there seemed no approproiate moment before this to bring it up –once the consultation had begun it would run its usual course (directed by the doctor) and unplanned for detours may not be easy to insert smoothly – hence the patient is under pressure to wait until the closing stage to bring up new information.

(ii) Timidity. Not wanting to bother the doctor with an unimportant matter – the patient was uncertain that she should bring up the letter at all, as surely the doctor would have referred to it if it had been important. Therefore, the patient only just had the courage to bring the matter up at the end of the consultation. Would this suggest that the doctor had been successful or unsuccessful in creating a patient-centred atmosphere? (i.e. successful in that at least the patient was able to ask about it at the end – so she was not totally in awe of the doctor OR unsuccessful in that the patient was unable to bring it up earlier because the doctor did not give her any opportunity in the main part of the consultation due to the doctor following his own sequential agenda.

(iii) Cultural. Because of the underlying socio-psychological factors affecting Japanese interpersonal relationships (such as dependence and obligation - Lebra), bothering a stranger (out-group member) on your own behalf is always problematic, requiring much hedging or politeness from the request maker, as well as much reassurance by the request recipient. Hence, it will be done in extremis and/or where the environment is particularly favourable and non-intimidating.

Even if it could be established that any one of these possibilities is relevant, how could it be demonstrated that one is more relevant than another? Would cultural norms make a Japanese patient less inclined to 'bother' the doctor than would a British or American patient? A more qualitative investigation interviewing the patient about why he or she said something in a particular way might reveal what was going through his/her mind during the consultation, and why he or she waited until the end. A larger scale quantitative study of the comparative frequency of these kinds of sequences in Japanese consultations in comparison with British consultations would help resolve this issue, but even that would hardly be conclusive – it could indicate a certain degree of probability, but not demonstrate an empirical fact.

6.6 Summary

In this chapter I have examined ways in which doctors make consultations patient-centred. The more patient-centred the consultation, the easier it is for the patient to give

his/her account to the doctor to enable the diagnostic process, and the more satisfied the patient is that he/she has managed to explain the problem that has brought him or her to seek advice from this doctor. Patient-centeredness is achieved through the doctor's attitude expressed through the greetings phase, the manner in which the doctor questions the patient, the doctor's backchannels, and the extent to which the patient is allowed to develop his/her story through long narratives.

We saw that in the JD consultations, which are mainly concerned with history-taking phases, there is more doctor backchannelling, while the patient gives information about him/herself. Conversely, more backchannelling could be found from the patient and longer utterances from the doctor in the SD consultations that are accounted for by rephrasing and repair (both self-initiated and other-initiated) as he/she attempts to ensure that the information he gives to the patient is as clear as possible.

Finally, I explored whether, in both the SD and JD data, there is a correlation between the age of the patient and the length of the consultation regarding both the total amount of words uttered and the proportion of words uttered by the patient in particular. Regarding the proportion of patient input, in both the SD and the JD data the older the patient is, the more he or she is likely to contribute verbally. Meanwhile, those SD consultations involving older patients seem to have more utterances overall (by both D and P), whereas in the JD data, those consultations involving middle-aged patients are significantly longer than those of older and younger patients. I have suggested that this might be due to greater assertiveness by middle-aged patients, which affects the usual asymmetry of power between doctor and patient.

7. PATIENT-CENTEREDNESS IN THE JAPANESE CONTEXT

7.1 Dependency as a cultural feature of the Japanese consultations

How might cultural factors restrict or shape the institutional asymmetry of Japanese doctor-patient interactions in a way to make the interactions definable in some way as 'Japanese'? If medical consultations do have culturally specific features, then pragmatic misunderstandings would be expected to occur sometimes when a non-Japanese patient meets a Japanese doctor or vice versa. According to Schegloff (1987) the causes of any misunderstandings in conversations (whether cultural, social, linguistic or educational) will become apparent through our analysis of the structure of the interaction, so we do not need to bring to the analysis a selection of background motives (such as cultural differences) to explain any misunderstandings (ibid: 202-3). This being the case, an examination of the discourse of Japanese medical consultations should reveal evidence about the nature of Japanese interpersonal relationships, and the aim of this chapter is to determine if it is possible to detect such cultural influences in the discourse I recorded.

There is nothing intrinsically unique about the cultural features underlying any society – the psychological building blocks of a social group are universal. However, the importance given to one particular feature over another in one society results in different expectations of interpersonal behaviour within those societies. Such basic cultural components, are comparable to basic building blocks in other areas of scientific enquiry: a finite number of chemical elements accounts for all physical material; two pairs of base amino acids account for every strand of DNA; and a finite list of universal phonetic and grammatical features accounts for all possible variations in human language. Differences in culture might similarly be accounted for by differences in the combinations of such a finite group of variables. The emphases given to each of these variables by a particular group, allows that group to be examined in an objective, non-stereotyped way. Hofstede's (1997) study is a notable attempt to identify such cultural building blocks, in which he arrived at his five universal psychological polarities (hierarchy⇔equality, individualism⇔collectivism, masculinity⇔femininity, high⇔low uncertainty avoidance, long-termism⇔short-termism). In this way cultural (group) behaviour can be placed in a clear analytic framework. This means that, in the same way that institutionally specific interactions can be analysed according to the understood roles and objectives of the participants defined by the setting, (such as Hymes' (1972) SPEAKING model), a cultural analysis of the same interaction might

be made drawing on a set of universal cultural concepts.

Aspects of interpersonal relationships are displayed in conversations through the pragmatic choices of the participants. One power relationship that exists overtly in Japanese society, but not in British society is the *sempai - kouhai* relationship. A satisfactory translation for these terms in English is difficult to find – senior/junior or superior/subordinate – are often used, but they do not convey the emotional power or the element of dependency (*amae*) contained in the Japanese words. Dependency is not relevant in a chance encounter in the street between two complete strangers. It would also have less impact in a relationship between intimate friends, even if there is a difference in age, because this is not a group-based relationship, but a personal one. Also, even with a given institutional setting (e.g. the office, or a student club) it is possible to step out of the *sempai-kouhai* roles at certain times, so, instead of the more ambiguous, less committal and more formulaic phraseology used during their working relationship (*tatemae*), colleagues can say what they really think to each other (*hone*) without prejudice, such as at after work drinking party, where colleagues on different rungs of the hierarchy may open up about their real feelings to each other. This is undoubtedly a necessary safety valve for the junior members to let off steam, and for the senior members to explain the pressures that they too are under.

While Dale (1986) has debunked *amae* as a psychological feature of the Japanese individual within the state (§2.3.4.2) I want to see if the concept may still have any currency in helping us understand interactions between people at an individual level: specifically does it add anything to the understanding of patient-centredness in Japanese doctor-patient consultations. According to Hofstede's (1997) rankings of five dimensions of culture, Japanese culture is more paternalistic than English culture: large power distance means 'less powerful people should be more dependent on the more powerful' (ibid: 37); strong uncertainty avoidance means that teachers and other experts are 'supposed to have all the answers' (ibid: 125); strong collectivism means more high-context communication (ibid: 67). Are any of these features detectable in the data?

To what extent are institutional interactions or other kinds of service encounters affected by dependency? An interaction a doctor and a patient is not the same as communication between an employer and an employee, since the relationship between the participants is temporary, and the patient often has the option of consulting a different doctor if he/she is not satisfied with the treatment offered by the present one (this is not always true, of course, the size of the community will obviously affect the amount of choice the patient has (compare this study with Ohtaki et al 2003). So there are elements of a service encounter involved, in which the patient is the customer and the doctor is the service provider. This is

more likely where there is competition between prvate clinics in large urban areas, for example, as noted in §2.4. Even so, for the duration of the encounter the patient clearly accepts that in the normal course of events the doctor controls speaking rights or turn allocation; the doctor's role is to get information from the patient through questioning and feedback while the patient is expected to provide this information. If the patient subverts this, by for example not providing the information that has been asked of him/her, or by using interrogation strategies to the doctor instead, both participants would know it was dispreferred and deal with it on that basis. This understanding of the institutional setting forms the pragmatic basis of the conversation.

In this chapter, in sections §7.2, §7.3 and §7.4, I analyse three episodes in the data highlighting the doctor (giving good news; apologising for miscommunication, giving medical advice) and in §7.5 I make a quantitative comparative analysis of the emergence of laughter in the Japanese data, compared to data from British doctor–patient conversations. In this way I explore whether a cultural interpretation of the data (based on dependency) might help reveal more about the interaction than one based solely on the clinical model (mutual participation) discussed thus far. As noted above, the medical consultation is not based a prototypical *amae* relationship, particularly the case in the first encounter between a doctor and patient, yet for the duration of this encounter the patient is clearly *dependent* on the doctor regarding his/her expert knowledge and as the gate-keeper to treatment.

7.2 Doctor Gives Good News

The breaking of bad news has also been a focus of study in the literature on doctor-pationt communication (e.g. Maynard, 2003; Barnet et al, 2007). In one (questionnaire based) study of medical students attitudes to breaking bad news De Valc et al (2001) found that of the three established models of disclosure– non-disclosure, full-disclosure and individualized (patient-centred) disclosure – male and female students both preferred individualized disclosure. Maynard (2003) also investigates the similarities and differences between giving good news and bad news, both of which he calls 'flashbulb memories', characterised by surprise or novelty, and as having emotional consequences for the receiver. In my data I found one sequence of good news giving, which I analyse for evidence of Japanese cultural influence. In #59 the patient has been referred to the hospital after an X-ray has revealed a shadow on her lung and she is now meeting this doctor after just having had a series of tests to check for cancer. The doctor allays her fears right at the start of the consultation (giving the good news) stating that she does not have a serious illness, and explaining that he'll give a detailed explanation of the results to her after he carries out a physical examination. Here is

the opening sequence of #59:

1	D: hai (.) douzo	*D: yes (.) please come in*
2	P: shitsurei shimasu	*P: Excuse me*
3	D: hai douzo (.) kochira ni:	*D: yes please sit down (.) here*
4	D: hai kauntaa ni (...)	*D: yes at the counter (…)*
5	D: hai (.) mazu shinpai sarete iru deshou kara (.) ketsuron kara desu ne	*D: yes (.) first because I expect you must be worried (.) I'll start from the conclusion right*
6	P: hai	*P: yes*
7	D: ano (.) ijou nai desu kara	*D: um (.) there's nothing out of order so*
8	P: a (.) sou desu ka	*P: oh (.) is that so*
9	D: ano (.) genzai no byouki wa nai desu kara	*D: um (.) there is no existing illness so*
10	P: dou iu koto nan desu ka	*P: what kind of thing is it then*
11	D: (.) ato de kuwashiku setsumei shimasu kedomo (.) ee to (.) anata jishin wa kidzuite rassharanai n desu kedo mo (.) mukashi kekkaku wo yararete	*D: (.) later I'll explain in detail but (.) um and (.) as for you yourself (.) um er (.) you yourself don't notice it now but (.) a long time ago it caused some damage*
12	P: hai	*P: yes*

(#59 P=F62; D=B1M)

Throughout this consultation the doctor reassures the patient, as she has come with the worry that she may have lung cancer, so there are many sequences where the patient apologises (presumably for taking up his time with something that turned out not to be as serious as she had thought) and the doctor responds with soothing words, empathizing with her – he understands how worrying it must have been for her). Then at the end, the patient refers to the sealed envelop containing the referral letter that she thinks might have contained some kind of information about her concerning cancer. The doctor immediately picks up the hint and reassures her again:

1	P: nanka kore fuusho ga haitta no kitan desu kedomo	*P: how can I say (.) this (sealed) letter came to my house actually*
2	D: a (.) kore (.) kinkyuusei no haikekkaku no (.) kage dake data tte koto kaite okurimasu no de:	*D: ah (.) this (.) acute tuberculosis (.) it was only the shadow I'll write to them about that*
3	P: moushiwake arimasen	*P: I apologise for that*
4	D: daijoubu desu (.) ima no tokoro haigan wa nai desu kara	*D: that's all right (.) at this time there is no lung cancer, actually*
5	P: <laughs>	*P: <laughs>*
6	D: daijoubu desu (.) shii chii made torimashita kara	*D: it's alright (.) because (we)'ve now taken a CT scan*
7	P: hai (.) moushiwake arimasen (.) arigatou gozaimashita	*P: right (.) I apologise for that (.) thank you very much*

(#59 P=F62; D=B1M)

Notice two other features here – the apology formula – it represents the feeling of imposition and *indebtedness* (Benedict 1946) (Lebra 1976) (Barnlund 1989) that is a common feature in Japanese communication between people who are not members of the same group (the *uchi* (in-group) and *soto* (out-group) distinction, has been discussed in ethnographic literature on Japan, for example (Lebra 1976; Doi 1986; Bachnik 1994). Such cultural factors may well be at play here, causing the doctor to reassure the patient that she has not been wasting either his/her own time, and mitigate the feeling of indebtedness. This is a moment when cultural

sensitivities and institutional or professional obligations become intertwined. Both factors are motivated by similar sensitivities, but to what extent is this feeling of bother and indebtedness culturally specific and to what extent is it institutionally oriented? Indebtedness, while highlighted in the cultural literature on Japan, is surely a universal feature of human societies. Even so, having seen that this is a very strong feature of Japanese interpersonal relations, we should at least consider the possibility that this sequence has specific cultural undertones that are separate from the medical situation.

In the next section I consider an apology sequence that suggests even more strongly that the Japanese understanding of in-group membership may be affecting the doctor's verbal behaviour, beyond what would be expected of the institutional norms I have so far discussed.

7.3 Doctor Apologises For Miscommunication

There is a lot going on in consultation #55. The patient has failed to understand the instructions at the end of his previous JD consultation (#50) that he should go for an X-ray, and then come back again to the waiting room before he has the follow up interview with the SD. After this the doctor spends the opening part of consultation confused, trying to work out what has happened and how to proceed. This mishap, and the resulting decision by the doctor to take the blame for the misunderstanding undermines the default institutional authority of the doctor and the interaction takes on some features of a service encounter with the patient in the role of customer. After he has ascertained the series of events that has led to the misunderstanding, there is an apology sequence.

1	D: [ee] koko (.) koko wa. aa naruhodo naa (.) sumi ni nattenai desu ne a (.) sore wa setsumei ga warukatta desu ne (.) moushiwakenai desu ne (.) eh tada (.)	*D: [right here (.) here. Oh indeed right (.) it's not finished right. Oh (.) as for that the explanation was bad wasn't it (.) I'm very sorry (.) um just*
2	P: hai.	*P: yes*
3	D: aa shinsatsu kara saki ni shimasu node ne (.) [ee]	*D: oh I'll do the examination first (.) [yes]*
4	P: [hai] hai. kore zenbu nuida hou ga?	*P: [yes] yes this should I take everything off?*
5	D: ee sou desu (.) hai: sou da (.) ekkusu sen ukeru toko betsuna hou ni aru kara (.) <Laugh> sore setsumei shinakatta hou ga warui (.) <Laugh>	*D: yes that's right (.) ye:s like that (.) the place to have you x-ray taken is in a separate area actually (.) <laugh> the fact that it wasn't explained is bad (.) <laugh>*
6	P: ie ie.	*P: no no <not at all>*
7	D: a (.) sore de zutto matteta n desu ne?	*D: aah: (.) so you were waiting there all this time then?*
8	P: ha:	*P: yeah:*
9	D: aa sore wa chotto <exhales> muda na jikan wo are shite shimaimashita (.) doumo moushiwakenai.	*D: oh that is a little <exhales> waste of time that was (.) I really must apologise*

The doctor's three apologies stand out. The first apology (line 1) has two parts: first, accepting institutional responsibility for the misinformation, which is followed by desu ne,

a tag meaning 'right' or 'wasn't it?' that gives a feeling of sincerity; second, a neutral politeness expression meaning 'sorry', moushiwakenai, again followed by desu ne to express sincerity. A more polite form of the apology would be moushiwake arimasen, or the very polite moushiwake gozaimasen, which would be appropriate in a real service encounter. If the doctor used one of these forms here he might be seen as putting himself on a par with a shop assistant. After the apology the doctor changes topic with (.) ee tada (.), and the patient acknowledges in line 2 with hai. The doctor then immediately moves on to the business in hand – the physical examination. However, he is compelled to return to the misunderstanding and apologise for it in line 5. There is no direct verbal apology, but the illocutionary force is clear through his rephrasing of the acceptance of responsibility from line 1, which is both preceded by and followed by nervous laughter to indicate embarrassment. This time the patient gives a more emphatic acknowledgement that the doctor is taking responsibility, ie ie (line 6), which prompts the doctor to be empathic a (.) sore de zutto matteta n desu ne? (*aah. so you were waiting there all this time then?)* (line 7). The third apology (line 9) starts with positive politeness (expressing sympathy) as the doctor expresses his concern for the patient having wasted his time. This is followed by doumo moushiwakenai. Does the conversation (and the doctor in particular) need a more suitable second part to the adjacency pair to resolve it? If so, the doctor's two nervous laughs in line 5 are very important in signalling to the patient that the doctor is looking for some response (a third part adjacency pair) to indicate the apology has been accepted. The fact that the doctor wants more of an acknowledgement from the patient adds to the weight of the apology.

Later in the consultation the doctor has to return to the misunderstanding because the lung X-ray is still required to make a proper diagnosis and the patient still needs to have one taken. Bringing up the topic again initiates another apology sequence:

1	D: yoshin no isha ni wa (.) shashin ni iku youni to iwareta n desu ne? kedo basho made iwarenakatta desu ne:	*D: the doctor that saw you (.) he told you you had to have your picture taken didn't he? but he didn't tell you the place did he?*
2	P: ee (.) ano: soko no machiaishitsu tte boku rikai shichatta node.	*P: yes (.) the:n that waiting room that's what I understood*
3	D: aa (.) ie ie (.) sore wa chotto setsumei busoku de (.) moushiwakenai su (.) mudana jikan wo are shi [chatte]	*D: ah: (.) no no <not at all> (.) that was just for not explaining enough (.) I'm very sorry (.) it caused you to have a waste of [time]*
4	P: [iya] daijoubu desu	*P: [nope] it's alright*

This time, the patient is much more affirmative and says iya daijoubu desu (line 4). Even so, in the sequence following immediately on from this, the doctor gives extended reasons for the necessity of the X-ray (lines 5-11). The doctor uses a series of turns, to set up and elucidate why the X-ray is necessary:

5	D: ma (.) ima no tokoro mune no oto wa: (.)	*D: we (.) right now your chest sounds (.)*
6	P: hai	*P: yes*
7	D: sugoku kirei desu kedomo ne:	*D: very clear actually*
8	P: hai	*P: yes*
9	D: ee (.) ichiou tada anata mo haien nai ka douka shinpai darou to omounde	*D: yes (.) so then you are worried if you have pneumonia or not probably I suppose*
10	P: ee hai.	*P: right yes*
11	D: shashin de ano tashikamete mimasu kara.	*D: so in the photo we can ascertain and see*
12	P: wakarimashita (.) hai (.) sore to ano: (.)	*P: I understand (.) yes and (.)*

In lines 5 and 7 the doctor refers to the current examination having revealed no problem; then, at the end of line 7 he indicates that this is not enough information desu kere domo ne – the ne signalling he will go on to explain something else. After this, in line 9 the doctor makes a premise of an argument (the patient is probably worried about the possibility of pneumonia), which the patient is called to accept at the TRP following this. The patient accepts this premise (line 10), which allows the doctor to state the logical conclusion that the X-ray will be able to address the patient's worry (line 11). In line 12 he affirms to the doctor that he has understood and accepts the need for the X-ray, closing the sequence with wakarimashita (.) hai.

Apologies can be rendered in Japanese by moushiwake nai/arimasen, gomennasai or sumimasen.

Moushiwake nai/arimasen; gomennasai (T= 16; P= 5; JD= 2, SD= 9)

suimasen (sumimasen) (T = 42; P = 27; D = 15 (JD= 9, SD= 6))

Apologies by doctors involve a realignment of roles, since the doctor's institutional function is as an expert to whom the patient turns to for help, whereas in an apology situation the injured party (the patient) has the psychological edge as the apologiser (the doctor) has to admit weakness and culpability. In the consultation as a whole there is still an asymmetry of power in favour of the doctor, even though, as we saw in §2.2.4 the asymmetry of initiative (or speaking rights) shifts between each phase (ten Have 2001). It is the doctor's role to lead the interaction, moving it on from one phase to the next; the patient's role does not allow him/her to do this. An apology sequence could be regarded as a sub-phase. Once a mistake has been acknowledged and the doctor has initiated an apology sequence it cannot be resolved until the patient accepts the apology. In other words an apology is the first part of an adjacency pair that requires an acceptance as the second part. Until the patient offers an acceptance (or at least an acknowledgement) of the apology there is unresolved business in the interaction. Yet how can this realignment of roles be interpreted? When a doctor offers an apology it may be an extension of a patient-centred approach – using his/her professional status to mitigate the inherent asymmetry. On the other hand, he may be behaving as a service

provider who has upset a customer, implying that for the duration of an apology sequence there would be a subtle shift of psychological power in favour of the patient.

What cultural norms might come into play here? Even in Japanese interpersonal communication that is power-neutral (i.e. between parties who are not part of the same group – in-group relationships are often hierarchical and affected by dependency) there is a strong desire not to impinge on the time or impose demands on the other party, since you put yourself into a position of indebtedness to them (see Benedict's (1946) discussion of indebtedness in Japanese relationships – *on*, *gimu* and *giri*). In a service encounter in Japan, where the service provider is expected to be especially sensitive to the feelings and needs of the customer, the provider, as representative of his/her company, has a responsibility not to bother the customer. Therefore, any action or mistake inevitably involves elaborate apology behaviour. There is no question that the customer might be responsible for a mistake or a misunderstanding – the provider must always be the side that has to find fault in themselves (the way they communicated something, their lack of attention to some detail which could have avoided to the problem, and so on). The number and the quality of the apologies made by the doctor in the above sequence would suggest that he is behaving like a service provider.

7.4 Giving medical advice – guidance-cooperation vs. mutual participation

While there is clear evidence that Japanese doctors used strategies that aligned them with the mutual participation model, there were some sequences that were closer to guidance-participation, in particular when giving medical advice to a patient. One sequence in an SD consultation (#8) was particularly noteworthy in this regard. Just before the close of the consultation the doctor explains, in a long monologue, the dangers of continuing to smoke to his middle-aged male patient. He tries to tell the patient to stop smoking without actually using any directives. The patient has already been diagnosed with asthma, and a treatment plan has already been set in place – the patient will come back for further treatment at a later date, which was discussed just before the following long monologue by the doctor.

1	D: ato (.) tabako wa desu ne (.) yameta hou ga ii desu (.) ano ima no shoujou wa tabako ga genin dewa nai to omoimasu hotondo wa iya (.) tashou wa eikyou aru ka na maa (.) tabako wa sui tsudzuketeite mo (.) zensoku wa kontorooru dekimasu kara ne (.) demo tabako sui tsudzuketeru to zensoku ja nai desu ke domo (…) toka hosoi kikan toka hai no oku ga kowarete kuru deshou (.) zensoku to hijou ni nita youna shoujou okoshitemasu (.) soo tabako ni yoru eikyou to zensoku ga kasanatte korya (.) soutou tsurai desu (.) zensoku wa kontorooru dekimasu kedo mo (.) naosu	*D: and (.) regarding smoking, you know (.) it's best to stop (.) um as for (your) present symptoms smoking is not the cause (I) think basically (.) no (.) there's a little influence maybe well (.) even if you keep on smoking cigarettes because (we) can control (the) asthma right (.) but keeping on smoking and not asthma actually (.) though (…) or the bronchus or the inside of the lungs are damaged (.) symptoms that look very much like asthma are caused. this influence and asthma caused by the cigarettes are painful when they come in succession (.) the asthma cannot be cured even though it can be*

	to iu no wa dekimasen kara ne (.) hotondo (.) to omoimasu ga (.) tabako ni yoru eikyou wa kore wo naosu kusuri wa nai (.) sore to zensoku wa (.) kontorooru dekiru to ii (.) tokuni arimasu yo ne? sono ue ni tabako no eikyou ga dandan dandan to kuwawatte (.) warukunatte iku to (.) soutou kokyuu ga kurushiku natte shigoto mo dekinaku natte kuruu n desu ne ano (.) maa gan tte kihontekina shindan ga aru n desu kedo ne (.) sore to wa betsu ni shinakute mo tabako wa kakujitsu ni jibun wo mushiban dekimasu node (.) toku ni tabako wa (.) sore dewa ano (.) koko de watashimasu node	*controlled you see (.) completely (.) I think actually (.) we don't have the medicine to cure the influence of cigarettes. If it were possible to control it and asthma it would be good right? Moreover the influence of cigarettes increases more and more gradually, the wheezing becomes more painful so you can't do your work right? umm (.) well actually, cancer they say is also a basic diagnosis (.) especially because even if cigarettes don't give you that they surely damage you (.) especially cigarettes (.) So, I 'll give you (this) here.*
2	P: hai	*P: yes*
3	D: kusuriya wa iin gai desu (.) byouin no soto desu soko de moratte kudasai (.) soshite juukyuu nichi ne	*D: the pharmacy is outside the hospital (.) it's outside the hospital (.) please get it there (.) So, the 19th – right?*

(#8 P=M56; D=B5M

Why is such a long monologue needed to tell the patient to stop smoking? The doctor is unwilling to give a bald on-record directive to the patient about his lifestyle because his position is to advise, not dictate. On the other hand, he clearly wants to make a strong impression on the patient about the potential ill effects of smoking, He has professional authority, but he has no moral authority over the patient's lifestyle. Consequently, there is a conflict between what he wants to say, and what he can say, and he vacillates between these two positions as he goes through the monologue. At times he is strident, at others he is frank about the scientific evidence about asthma and smoking (i.e. there is medicine which will still be effective even though the patient smokes), so he cannot pretend smoking will make the asthma worse if in fact it will not. The long speech is full of pauses and self-repairs as the doctor tries to overcome his dilemma, and the patient is given no opportunity for his own input because the doctor terminates the topic at the end of his long lecturing monologue.

Nevertheless, the illocutionary force is absolutely clear – it is a directive to stop smoking. This is shown through his consideration of the medical evidence, - the patient's chronic lung illness and the fact that smoking can only make it worse and could have an effect on his ability to earn a living. His mentioning gan (*cancer*) near the end focuses the patient's mind on the seriousness of his smoking, although it is not prompted by any medical evidence, but it may refer to an earlier sequence where there was mention of a dark area on the patient's lungs. The doctor concludes his speech with the strong warning:

> sore to wa betsu ni shinakute mo tabako wa kakujitsu ni jibun wo mushiban dekimasu node
>
> *especially because even if cigarettes don't give you that they surely damage you*

Compare this with a similar sequence in a British GP surgery in Nottingham (from the British National Corpus - BNC), where it is the patient who prompts the doctor into

giving him a good reason for stopping smoking.

1	D: this'll squeeze your arm a bit (.) okay? <pumping up blood pressure armband> still smoking?
2	P: mm.
3	D: drinking?
4	P: no (.....)
5	D: smoking's bad for you of course but I mean [(…)]
6	P: [you r~] you really think I ought to stop? be honest (.) give me a real
7	D: well (.)
8	P: professional.
9	D: smoking will help stress (.) but smoking is much more likely to cause serious physical problems (.) than stress is that's the catch er and it it's reckoned a hundred and sixty thousand people die a year (.) of smoking related diseases er I don't know how many people die of stress related diseases but it's probably under a hundredth er and I think that puts it into context (.) overall your health would be a lot better off without your cigarette and if you find then things like stress and anxiety come through (.) there are other ways of treating that and sorting that out I can't think of any case where people are better off smoking than not smoking (.) really
10	P: what about a pipe?
11	D: well pipes are better than cigarettes because you don't inhale so much.
12	P: mm.
13	D: (…) fact if you don't inhale at all you're doing yourself a big favour (.) but you nearly always get some down ion to the system and really the o~ the only thing I could ethically recommend as a doctor (.) is stopping difficult to be ethically safe (.) this is safer than that (.) you know. (…) I mean the decision is yours and you may find you may wish to sort of take take things very slowly and very gradually (.)
14	P: mm
15	D: I'm not going to tell you to do anything (.) that's not what I'm here for (.) [but er]
16	P: [well I mean] er we have to take notice of you don't we?
17	D: yeah. Well no you don't actually (.) I mean y~ you are free <laughing> ignore our advice and [yeah I I know that]
18	P: [yeah (.) but I mean]
19	D: but I mean that would be my advice as a doctor (.) to stop smoking (.) in the long term.
20	P: mm.
21	D: certainly
22	P: bet you tell everybody

BNC, 1994: #G52

The patient wants to hear a 'professional' reason (i.e. one based on medical evidence) to help him reach a decision about his lifestyle – he wants to understand if the health dangers of smoking outweigh the benefits (i.e. reducing stress). Again the doctor's argument is clearly that smoking causes health risks, but he tries to use evidence and professional knowledge to inform the patient so that he can make the choice himself. The biggest difference between this sequence and the preceding Japanese one is that the British doctor is explicit about his role in the process:

- the decision is yours (13);
- I'm not going to tell you to do anything, that's not what I'm here for (15);
- You are free (laughing) ignore our advice and yeah I know that (17).

At the end of this he emphasizes his advice is based on his institutional role as the expert, distinguishing between his professional self and his identity outside the consulting room. This is a clear example of mutual participation, where the responsibility is put into the hands of the patient, but with the expert advice of the doctor. The doctor is therefore tending towards guidance-cooperation rather than mutual participation, and the contrast with the

British consultation is clear. However, can we draw any cultural conclusions from this difference?

First, in the Japanese situation the patient has asthma, and this is the primary concern of the doctor. The patient's smoking therefore has a more immediate relevance than it does in the British situation, where the patient asks about smoking after the doctor has asked the routine general question; it is not related to his presenting condition – the pain in his arm. This would make it more imperative for the Japanese doctor to be directive. More telling is the fact that the patient is not given a chance to comment after the doctor's speech, because he moves on to the closing phase immediately, using his institutional status to dominate and not allow any questions from the patient. A more patient-centred approach might be to engage the patient in a discussion about whether he thinks he would be able to give up and if so in what ways this might be achieved. There was a much more constructive and empathetic attempt by the British doctor to encourage the patient to quit in line 13: "*you may want to take things very slowly and very gradually*". In contrast the Japanese doctor seems much less helpful and more distant. Something we might expect of a *sempai* telling his/her *kouhai* what to do. This may be evidence of Japanese specific interpersonal behaviour that causes the doctor to veer away from mutual participation and towards guidance-cooperation, suggestive of a paternalistic relationship.

Having looked at three episodes in the Japanese data that suggest cultural influences I now move on to a quantitative analysis of one discourse feature that emerged in quite different ways in the Japanese data and British doctor-patient data from the British National Corpus: doctor and patient laughter. I chose laughter, as it is an indicator of solidarity (Coates, 2007), which, if by the doctor would suggest patient-centeredness.

7.5 Laughter

Laughter can ease a difficult situation or signal the trickiness of something that is to come. It creates solidarity by decreasing stress and anxiety, breaking the ice, generating good will, and it mitigates embarrassment or guilt after we have done something wrong. The aspect of solidarity in laughter is important to this thesis, because an attempt at solidarity by the doctor is an indication of patient-centredness. Coates (2007) argues that in a conversation we frame our actions as either 'serious' or as 'play', giving examples of how talk switches from serious into play. A 'play frame' signals that the talk will be humorous, regardless of the topic, but the humour is a complex joint construction between the speaker intending a humorous remark, and his/her interlocutor(s), who need to respond in the appropriate way to make it succeed. Laughter is the verbal signal that a bid for humour has succeeded, so

instances of laughter in a conversation are material evidence of solidarity. Coates explains the link between solidarity and laughter as follows:

> Collaboration is an essential part of playful talk, since conversational participants have to recognise that a play frame has been invoked and then have to choose to maintain it. Because conversational humour is a joint activity, involving all participants at talk, many commentators see its chief function as being the creation and maintenance of solidarity…The creation of solidarity is an inevitable consequence of the joint construction of a play frame, since interactants who collaborate in humorous talk, ''necessarily display how finely tuned they are to each other'' Coates (2007: 32).

Humour is collaboration between the participants, which is intended to promote solidarity – it succeeds because they have all agreed to enter a play frame together.

Jefferson et al (1987) show how laughter is a socially organised activity. It is an 'achieved product of a methodic, co-ordinated process', but, it is not only a relevant and consequential response to a prior utterance, it also has a bearing on the following actions; the decision to continue or extend the laughter or not depends on the signalled agreement of all participants. Laughing is rule-governed; unlike other non-speech sounds, it has the status of an official conversational activity, it can be a relevant consequential next action to some prior action, and it can be named as a response to a prior utterance ('I said X and he laughed'). Therefore, a cough or a sneeze can be accidental and incidental, while laughter can never be. Haakana analysed Finnish patients' laughter in consultations, arguing that there are certain activities routinely done with laughter, for example rejecting the doctor's 'candidate understandings' with more problematic descriptions' during the initial presentation of the illness. The patient's laughter, which is not reciprocated by the doctor indicates the activity at hand is delicate and it acts as 'a remedying feature in different kinds of interactional problems' (Haakana, 2001).

In the Japanese data I counted 54 instances of laughter by both participants: 32 by patients and 22 by doctors (Table 8.3). Laughter may be responsive or anticipatory. Responsive laughter comes in response to either the previous speaker' utterance, or sometimes in response to something the present speaker says. Responsive laughter by the patient that shows the doctor has put him or her at ease. Anticipatory laughter precedes or anticipates something that the current speaker is about to say, often prefacing a delicate or embarrassing topic. Laughter sometimes emerges as a response to patient or doctor humour, signalling solidarity between the participants, and doctors' light-hearted comments can put the patient at his/her ease. However, the most common source of laughter by both participants was embarrassment or nervousness at dealing with a difficult situation.

Table 7.1: Laughter in the Japanese Consultations

Cause of Laughter		Patient	Doctor	Total
Nervousness or embarrassment	*General*	*14*	*5*	**38**
	Delicate Topic	*1*	*4*	
	Explaining difficult information	*0*	*2*	
	Response to dispreferred comment	*0*	*5*	
	Relief at good news/	*4*	*0*	
	Worry at possible bad news	*3*	*0*	
Self-deprecation		*4*	*1*	**5**
Joking/witty comments (solidarity/ intimacy)	*Prefacing a joke/witty comment*	*3*	*3*	**11**
	Response to other's laughter (parallelism)	*3*	*2*	
Total		***32***	***22***	**54**

Examples

Nervousness or embarrassment
P is embarrassed at D's attention or courtesy.
D has to give P some unwelcome instructions about lifestyle changes.
D has to ask about P's deceased relative.
P's direct response causes difficulty for D.
P laughs on being told a medical procedure will be more arduous than a CT scan.

Self-deprecation
P is embarrassed about her inability to explain symptoms clearly.

Joking
D comments that P doesn't like his job (P wants next appointment during working hours).
Older P checks if she should include deceased siblings in family member count.

Laughter appeared for three reasons:

(i) Embarrassment or nervousness

This kind of laughter emerges as one participant orients him/herself to an utterance by the previous speaker that is causing him/her unease. This is the most common context in which patient laughter emerges in the Japanese data. There are three causes of this – relief, embarrassment at something the doctor has said and nervousness. This laughter can come from either doctor or patient, and it may be anticipatory or responsive. The following example from the start of #40, shows patient responsive laughter indicating discomfort.

1	D: ano setsumei [wa	*D: um (.) an explana [tion*
2	P: [a (.) hai]	*P: [oh (.) yes]*
3	D: atta to] omoun desu kedo (.) kou yatte rokuon sasete itadaitemasu node (.) moshi ano tochuu de iyada to omottara itsu demo (.) kore kirimasu node (.) osshiette kudasai	*D: has] already been given I think (.) since today you have allowed us to record us (.) if um in the middle you think it is disagreeable at any time (.) I'll turn it off here (.) please tell me*
4	P: a <laughing>(.) ke (.) kekkou desu (.)	*P: oh <laughing> (.) tha (.) that's alright*
5	D: hai sore ja shinsatsu no mae ni kore made no keika toka ni tsuite ohanashi wo kikasete kudasai <NAME> to moushimasu	*D: right well then before the consultation I want to listen to your account of the course of events until now (.) I'm called <NAME> (*

(#40 P=F46; D=A3F)

Here, the patient laughs after the doctor has explained about the recording process and that the patient can request to turn it off any time during the consultation. This seems to be laughter through the over-explanation by the doctor, or because of modesty that the doctor is

taking her feelings into account in such an overt way.

There were also instances of anticipatory laughter by the patient, such as in the following sequence from #13:

1	D: (.) okosan wa↑	*D: any children?*
2	P: san nin	*P: three*
3	D: san nin desu ka↑	*D: is that three?*
4	P: u:n shinda hito mo ireru no↑ (laughs)	*P: umm including the dead one? (laughs)*
5	D: ee (.) sou desu ne.	*D: yes (.) that's right*
6	P: (laughs) ja yon nin	*P: (laughs) well four then*
7	D: aa sou desu ka (.) ue kara junban ni	*D: oh is that so (.) from the oldest the order of birth is*

(#13 P=F56); D=A2)

This sequence is awkward for the patient, as she may be worrying about the causing the doctor to feel sympathetic by revealing one of her children has died, so this could be embarrassment at drawing attention to herself. Since she cannot answer the question directly, she has to find a way of adding the necessary information about the dead child. The patient later reveals that this child has died in an accident.

(ii) Self-deprecation/modesty

This is the smallest category of the three, there are only four instances by patients and one by a doctor. In these cases the speaker is about to make an (unavoidable) statement that puts him or herself in a good light, so he/she signals understanding of this immodesty and downplays it with laughter. Here is an example from #51.

1	D: [ah sou desu ka (.) ee (.) ee]	*D: [oh is that so (.) right (.) right]*
	P: naan mo sensei nan demo nai kara tte (2.3) sore de (1.0) mou ii kara tte kinou ototoi desu ka (.) sensei mou daibu	*P: nothing doctor nothing at all so to say (2.3) and (1.0) because it's enough they say yesterday or the day before yesterday was it (.) doctor because it had already*
2	yokunatta kara taiin wa (.)	*got much better to be discharged (.)*
3	D: ee	*D: right*
	P: shite mo iin dakedo tte (.) dakedo hokudai no sensei ni ikkai (0.6) ano: <laugh> (0.8) mite moratta hou ga anshin	*P: would be OK but they said (.) but a Hokudai doctor once (0.6) <laugh> (0.8) looked me over so I was more relieved (.)*
4	dakara (.)	
5	D: un	*D: uhu*

(#51 P= M81; D=B1M)

In this sequence, the 81-year-old male patient recalls being examined by another doctor from this hospital, and he expresses his confidence in him. This therefore implies praise for the hospital as a whole, and therefore the present doctor, so his laughter at this point is due to the self-deprecation he feels in indirectly complementing the doctor in front of him.

(iii) Joking

Doctors' jokes reduce the stress of the encounter and enable the doctor to deliver difficult information in a less direct manner to accommodate the patient. For example, here is

an instance of laughter in response to a joke in #15, at the start of the physical examination:

1	D: soshitara ne (.) shinsatsu shimasu node (.) mou chotto ne uwagi (.) sono kago no naka ni irete moraemasu	*D: right, next (.) I'm going to do an examination so (.) a little more right, your jacket (.) can you put it in that basket for me*
2	P: hai (.) shigoto deru made konna netsu takaku naranakatta n desu kedo ne	*P: yes (.) until I leave for work this sort of fever didn't get high actually*
3	D: shigoto iya kai <laughs>	*D: you don't like your job then? <laughs>*
4	P: yappa (.) iya desu kedo mo <laughs>	*P: that's it (.) I hate it actually <laughs>*
5	D: sutoresu toka kakaru kai↑	*D: you don't have any stress or anything?*
6	P: hai↑	*P: come again?*
7	D: uun (.) anma sonna ni ishiki suru hou demo nai↑	*D: umm (.) not so much that you're aware of*
8	ishiki suru hou demo nai desu ne kekkou	*P: not that I'm aware of, that's right, quite*

(#15 D=B3; P=M32)

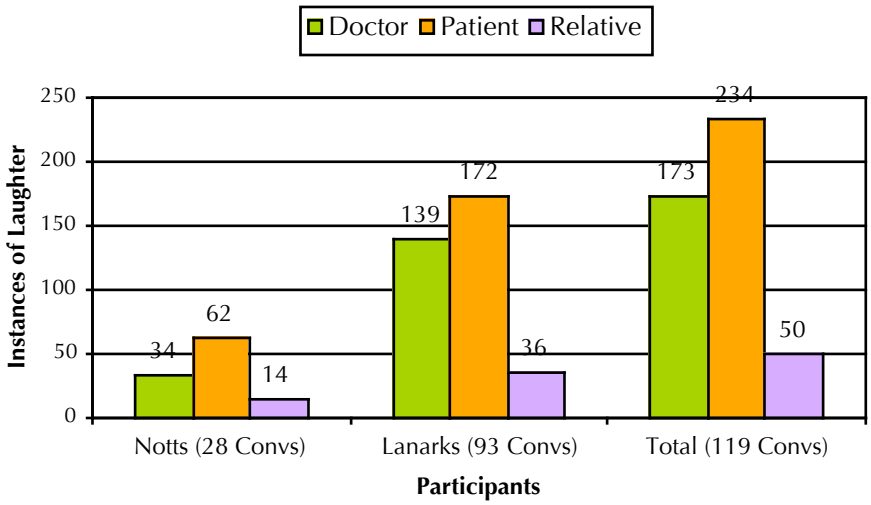
The doctor makes the joke, and the patient joins in solidarity by agreeing with him. The laughter by the patient in line 4 echoes the doctor's laughter and seems to show solidarity, reduce stress and thereby make the consultation more patient-centred, thereby showing solidarity, reducing stress and making the consultation more patient-centred.

Differences between laughter in British and Japanese consultations

I compared my Japanese data with English data from the British National Corpus (BNC 1994) to determine if there were any discourse patterns specific to each speaking context. The BNC data is from GP's surgeries whereas the Japanese data is from a large public hospital, so the consultations are not directly comparable, but they are a valuable collection of primary English data. The 119 doctor-patient conversations in the BNC are all recorded from two sources: a GP surgery in Nottinghamshire, and a GP surgery in Lanark. The recordings involve only one doctor in each surgery, but with a wide variety of patients in terms of age, gender and presenting condition. 50 of the BNC conversations involve new cases; the others are either referrals or return visits as part of ongoing treatment programmes. Many of the patients are also familiar to the doctors, even when the presenting condition is new, whereas in all the Japanese conversations the doctor is meeting the patient for the first time that day.

Instances of laughter by both participants in the Japanese consultations usually indicate embarrassment or discomfort, whereas instances of laughter in the BNC consultations are much more likely to indicate humour (reaffirming the relationship between the doctor and the patient). There were 457 instances of laughter in the BNC consultations, one token every 345 turns, in comparison to one token every 4,027 words in the Japanese data (twenty-three times less frequent).

Figure 7.1: Laughter in BNC data



There was also a difference in the way the laughter emerged in the two sets of data. While jokes and witty banter were evident in both contexts, in the Japanese data laughter was overwhelmingly associated with embarrassment or discomfort, whereas in the BNC data it was usually associated with solidarity building through joking. Laughter as an indicator of embarrassment may therefore be a way of hedging a comment that is required at a particular moment; it would be difficult to state the comment baldy because of the asymmetrical power relationship. The fact that this kind of laughter did not seem to occur in the British data points to less social distance between doctor and patient and less hesitation by patients when they needed to express themselves.

These differences might be accounted for by the differing relationships between doctor and patient. The consultations in the local GP surgeries often involved long-standing patients who were friendly with the doctor, so there was much more social talk. All the Japanese cases were first time visits and none of the patients had met the doctor before and there was an almost complete absence of social talk in the Hokkaido University Hospital data. In the BNC data, on the other hand, a frequent feature of the closing phase was a period of wrapping up talk between doctor and patient (holidays, family gossip, hobbies), which appeared in 11 out of the 20 new cases in the sample. Since social talk was also a feature of Ohtaki et al (2003)'s study in a rural clinic, it would appear that the institutional framework has less influence on the interaction when the doctor-patient relationship is ongoing, and the social distance is reduced. The lower percentage of time spent on social talk in Japan in Ohtaki's study (USA 12% versus Japan 5%) may reflect Japan's high-context culture (Hall 1989). Greater time spent in social talk in the USA appears to serve an affective function to build and maintain rapport. In Japanese medical encounters, the longer time spent on physical

examination (USA 12% versus Japan 29%) might result from Japanese styles of behaviour concordant with societal norms or rules. Alternatively, this could reflect a specialty-related phenomenon, namely that the Japanese internists may be spending more time on the physical examination than family physicians (Ohtaki et al 2003: 280).

7.6 Analysing the interactions for aspects of a Japanese culture

In this chapter I have presented examples from my data to suggest that there may be some features of the consultations that are specific to the Japanese context. However, without having comparable data from other language settings I am wary of claiming that any of the features I have highlighted are specific to the Japanese setting, and not universal. I presented external data from the BNC and summarised Ohtaki's study in order to provide empirical evidence to compare against my own data and raise the possibility that there are differences between the English and Japanese contexts even within the same institutional setting. While I feel my approach has shown that there may be culturally based differences in conversational style, the fact that the data I collected (from a one department in a large university hospital in an urban setting) is not directly comparable with the BNC data (from two GPs surgeries in the UK) or with Ohtaki's data from rural clinics in Japan and the USA makes this claim a tentative one. On the other hand, I do believe that the low degree of social talk in my data compared to that in the BNC data is consistant with Ohtaki et al's findings between the American and Japanese contexts. To confirm whether Japanese consultations do have a distinct discourse style more data needs to be collected from similar clinical contexts in different countries. Nevertheless, I have attempted to establish a number of features in the data which may or may not be culturally specific, and which can now be compared against data from other language contexts.

In §7.2 I suggested that indebtedness by the patient was the reason for her apology to the doctor, stating that this is a well-discussed aspect of Japanese culture. While not being a feature exclusive to Japanese society, it is a strong factor in Japanese interpersonal behaviour, deeply ingrained in both participants, making them sensitive to not imposing indebtedness on someone else. In §7.3 I examined an extended apology sequence that showed the importance this doctor attaches to providing the best service for his patient as a member of the hospital staff. The doctor is not being patient-centred, he is exhibiting the Japanese sense of belongingness and responsibility to his group (in this case, the hospital). It would not be possible for him to blame one of the other members of staff for the misinformation, as that would show a lack of respect for his workplace, thereby undermining his own position in the eyes of the patient. So this sequence can more properly be analysed through a cultural

approach than through an institutional one. I have contrasted one sequence in the Japanese data (doctor gives advice to the patient about smoking) with a similar sequence in a British doctor-patient encounter, arguing that although the differences in styles may be accounted for by individual differences the Japanese behaviour is less patient-centred, and therefore more consistent with a dependency relationship. Finally, I compared statistics about the emergence of laughter in the Japanese data with data from the British National Corpus, showing that the majority of laughter in the Japanese consultations could be accounted for by embarrassment, a release of tension, whereas in the BNC data laughter was an mainly an indicator of solidarity through humour. Given the different settings (new patients in the Japanese hospital versus a mix of new patients and ongoing patients in the British GP surgeries) this may only indicate a difference in familiarity between the participants. However, again, when the cause of the Japanese patients' laughter is modesty or self-deprecation this is consistent with a dependency relationship as the subordinate requires more apology-like hedging to make his/her voice heard.

8. CONCLUSIONS AND IMPLICATIONS

8.1 Overview

In this chapter I bring together the two aspects of my analysis of the Japanese medical consultations I recorded: (i) as representing a type of institutional discourse – the genre of doctor-patient discourse; (ii) as an example of discourse belonging to a specific national culture. Japanese. In this way I consider what the evidence reveals about how Japanese interpersonal behaviour influences medical interactions. I begin in §8.2.by considering what kind of institutional interaction the medical consultation is. In particular I consider some similarities it has to a service encounter. Then in §8.2.2 I look at cultural influences, making a distinction between patient-centredness (institutional) and *amae*, the notion of dependency that has been put forward as a feature of Japanese interpersonal behaviour (cultural). I draw on the evidence showing differences in laughter and social talk in the BNC and the Japanese data to indicate cultural differences. After this I look at the respective styles of discourse used in the junior doctor consultations, which in the main can be seen as interrogatories, and the senior doctor consultations, which have a wider range of communicative functions, including directives and questioning, but which tend to be dominated by doctor talk in the form of explanations. In §8.3 I consider the effectiveness of my research, assessing the combining of quantitative and qualitative methods to examine patient-centredness and cultural influences in the data. Finally, in §8.4 I explain the possible implications of my findings, considering how further research may develop our understanding of the impact of culture on interpersonal interaction, especially in institutional settings.

8.2 Cultural and institutional influences on the interactions

This study has considered, through an analysis of language in interaction, how the institutional framework of the doctor-patient consultation is affected by the cultural setting in which it takes place. This institutional setting has been well defined and well described through many previous clinical, sociological, psychological and linguistic studies. Culture, on the other hand, is much more elusive: Cultural values, which are the expectations people have of other members of their cultural group, can be known through examining the language and behaviour of the group (Hofstede 1997: 6). Accordingly, using an ethnographic approach – careful observation of social practice, especially interpersonal communication – we can gain an understanding of the cultural mindset of the group. The danger is in describing the group

in stereotypes that deny each member's individuality, and, more importantly for this present study, ignoring the effect of institutional or other factors (albeit within the same dominant/national cultural framework) on interpersonal interaction. However, not to consider culture at all when we look at interpersonal interaction would be to ignore one possible explanation for pragmatic strategies, silences, backchanneling, ambiguity or directness that clearly have a real presence in interpersonal interaction. Yet, how can cultural effects be assessed?

In chapter 2 I reviewed a number of comparative studies that show differences between Japanese and American communication styles (e.g. Senko Maynard has shown there is considerable differences in the style and meaning of backchannelling in mundane conversations between American and Japanese university students, and Barnlund has found other differences relating to pausing, while Ohtaki et al (2003) have found differences between American and Japanese consultation styles In particular, in the Japanese context, which has often been characterised as paternalistic, we would expect consultations more directive, since the dependent (patient) puts him/herself in the hands of the doctor, therefore making a mutual participation model unlikely, or if attempted by the doctor, unsuccessful. We can determine whether or not this is the case through examining these medical consultations to identify doctors' directives, and consider whether the communication strategies he/she uses suggest something like the dependency relationship characterised as the key component of Japanese interpersonal behaviour.

In a medical consultation, the patient asks for help from the doctor to find out what is wrong with him or her, to find out the prognosis and the treatment options available, and to set appropriate treatment plans in motion. In this way the patient is willing to hand over decision-making prerogatives about his/her own life to the doctor, putting him or herself in a dependent position and thereby having less power to direct the course of the interaction. This is what makes it differ from a simple service encounter, where a customer, although dependent on information from the service provider, is the decision maker, and controls when the interaction comes to an end. Conversely, as I showed in chapter 4, in the medical consultation it is the doctor who initiates the closing stage of the encounter. To explore this further, in the next section I shall consider in what ways the institutional framework influences the interaction and distinguishes it from a service encounter.

8.2.1 The institutional nature of the doctor-patient encounter

Medical treatment is not obligatory; someone who feels ill has no duty to seek medical advice or treatment, they visit the hospital of their own free will, at least in the

setting that I have described and investigated in this research[38]). On discovering some ache or pain or other health abnormality, the sufferer has the option either to do nothing about it and carry on regardless, or to seek other means by which to cope with it – going to a chemist, researching the illness and acting on that information, getting advice from friends, family, religious figures, following some superstitious practice, and so on. However, the decision to seek professional medical help in itself signals that the sufferer is willing to give up at least some degree of self-responsibility or control over the state of our body and place it in the hands of another person whom society has licensed as a professional. Consequently, the sufferer wants the doctor to make decisions for him that he/she feels he cannot make him/herself, and this relieving of responsibility and of the stress of having to face something alone may be an early part of the healing process itself.

The first encounter between patient and doctor is similar to a first encounter between any two individuals. The two parties are more guarded in the information they offer or the kinds of questions they ask than they would be with long-standing acquaintances or family members. In subsequent interactions the interpersonal dynamics between these same participants will likely change: growing familiarity between the participants allows the creation of shorthand references to items mentioned in previous encounters. In addition, more knowledge about the speaking partner is likely to lead to more confidence about using different language registers, manifested through less strict adherence to the immediate medical problem, allowing more scope for informal or social talk. All the consultations I recorded were new cases: they were encounters between strangers. As such, they differ from cases where the GPs and the patients have a long-standing relationship, which may allow a subversion of the institutional roles. Long-standing relationships were a feature of the Japanese and American data collected by Ohtaki et al (2003), where they also noted the prevalence of social talk in the Japanese consultations. Regarding this aspect it could be argued that the data I collected is more prototypically institutional than the other two cases.

Service encounter or clinical encounter?

To what extent can these medical consultations be regarded as service encounters - encounters between strangers who have to cooperate with each other for their own ends (which, I have argued, largely coincide, but are not always identical), and to what extent can they be interpreted in cultural terms? There is little evidence to support the idea that the doctor-patient relationship is governed by dependency, or *amae*, since there is no *sempai-kouhai* relationship. *Sempai* can be translated as 'senior', someone older or more experienced

[38] My discussion obviously does not include accident and emergency cases, or cases where someone is not able to make decisions for themselves due to mental illness or brain damage, or another reason where medical treatment would be decided by another party.

within some institutional or corporate setting, but not usually a person of higher rank. The *sempai* is more akin to an older brother or sister who will look after the younger or less experienced *kouhai*, showing him/her how to behave and how to do tasks. This is an archetypical *amae* relationship, as a *kouhai* is indulged by a *sempai*, but in return the *kouhai* surrenders a degree of decision-making. The *sempai-kouhai* relationship appears in school and university student clubs (the third years are *sempai* to the second and first years, and the second years are *sempai* to the first years), in companies (the newest recruits – 'freshmen' – are *kouhai* to last year's recruits) and even in the Japanese Diet, where the newest MPs are looked after by experienced *sempai* who guide them through the systems and procedures.

There are obvious aspects of medicine in Japan that are influenced by market forces, with lively competition between practices in big cities such as Sapporo. The number of medical practices and healthcare providers in Japan continues to grow, as shown in Table 8.1.

Table 8.1: Medical care facilities in Japan

	Hospitals	**General Clinics**	**Dental Clinics**	**Total**
1983	9,515	78,991	43,115	**131,621**
2004	9,077	97,051	66,557	**172,685**

	Physicians	Dentists	Pharmacists	Nurses
1994 *(per 100,000 pop)*	228,643*(182.5)*	79,896*(63.8)*	157,719*(125.9)*	862,013*(688.2)*
2002 *(per 100,000 pop)*	260,500*(204)*	91,783*(72)*	212,720*(167)*	1,096,967*(861)*

(Ministry of Health 2007)

With a growing number of health providers available, the patient/customer has more choice, and can be more selective in who he or she goes to for treatment. Just like cram schools, restaurants, estate agents or any other business sectors, private clinics and hospitals have to advertise their services to attract customers. Hence, there is a prevalence of healthcare advertising on trains and buses in local newspapers and magazines and on the local broadcasting media. As a consequence, doctors have to give thought not only to treatment and care, but also to trying to get the patient to come back to their clinic, and a satisfied customer will also be more likely to recommend the practice to his/her friends and family.

In addition to such market pressures the image of doctors has taken a blow in recent times through widely publicised stories of malpractice or negligence[39]. There is now a wider understanding of informed consent, which may serve to break down paternalistic attitudes by doctors (§2.4), and patients expect their doctors to explain more. Law suits against doctors in Japan have been rising in recent times, from 352 suits in 1990 to 767 suits in 2000; internal

[39] Such as the case of blood banks in Osaka and Tokyo tainted by the HIV virus, which subsequently infected patients suffering from hepatitis – city authorities were found guilty of negligence. Wikipedia (2007). HIV-tainted blood scandal (Japan). **2007**.

medicine and surgery constitute the highest proportion of suits, with each accounting for 23% of the total. The two main causes of the law suits were injections (28%) and medicines (14%), with operations only accounting for 3% (Cybermed 2000). Better communication between doctor and patient is one way to help mitigate these problems: if the course of treatment is negotiated and clearly established between both parties the patient is going to be better prepared for the possible outcomes[40]. The more patient-centred the process of negotiation is and the more the doctor encourages the voice of the patient to emerge, the more the patient will give expression to his/her worries or doubts about his/her condition and the courses of action that may be available. The two parties negotiate mutual understanding and the doctor presents the information from the world of medicine in life world terms then the patient can confidently give consent, and both parties can proceed with the next stage of inquiry or treatment. When the consent truly is informed and not in doubt the patient may feel less inclined to sue if the treatment is not successful because she/he has understood the possible outcomes through open discussion with the doctor. On the other hand, if the patient does sue, the doctor has a stronger basis for defence: the possible alternatives and outcomes were explained carefully, and the patient was encouraged and given the opportunity to voice his/her concerns and be an active partner in the decision-making process about the treatment. The less D is seen to be trying to preserve his/her professional autonomy and authority (Leflar, 1996), the more trust there is between D and P, and the more likely any problems or misunderstandings can be addressed through continued dialogue, rather than a resort to the law.

Power (psychological distance) and solidarity

In the data, there seemed to be an expectation by some patients that the doctor should be directive – and consultation #2 showed how overuse of polite terms by the doctor seemed to give an impression that the doctor was not in control. Ueda and Hasegawa (1999) suggest that the politeness level of a Japanese doctor's directives is related to urgency and psychological distance:

> It can be said that using such language strategies to be able to connect and build harmonious doctor-patient relations, is a privilege left to the doctor. However, at the same time, in using such a strategy maybe there is a danger of the doctor promoting an asymmetrical relationship and implicitly depriving the patient of his/her voice (Ueda and Hasegawa 1999).

In fact, the asymmetry of power is an institutional given, which the doctor cannot subvert or eradicate. However, the doctor may use his/her power to promote patient-centeredness by

involving the patient in the decision-making, and thereby allowing the patient's voice to emerge. For example, in §4.2.1 we saw that transition markers such as ja or dewa () signal the end of a topic, and indicate that the speaker is controlling the direction of the conversation and therefore has more power at that point. In the overwhelming number of cases these expressions are used by the doctor to switch topic, indicating that he has most influence over the direction of the conversation and the encounter as a whole (Table 8.2). For example, JDs use these during the history-taking phases to move on to the next area of questioning.

Table 8.2: Topic switch signals used by doctor and patient in 72 Japanese consultations

Topic switch signal	Tokens by doctor (%)	Tokens by patient (%)
sore ja	23 (100)	0 (0)
ja*	103 (93)	8 (7)
sore dewa	10 (91)	1 (9)
dewa*	8 (100)	0 (0)
soshitara	65 (87)	10 (13)

* Counts of ja and dewa used only as a topic switch marker; not in their other functional roles (making a decision; confirming; qualifying "actually"; saying "goodbye"; prefacing a concern or a question)

Ja is also used by the doctor to preface a direction, such as during a physical examination (37 instances), during an explanation of test results (X-ray), or to preface a summing up, a repair or a confirmation of what the patient has just said. The latter usage is also seen by patients, where it indicates an engagement in the diagnostic process, but again most instances are by the doctor (P= 16: D = 99), underlining his leading role in the interaction.

Differences between the Japanese data and the BNC data regarding the use of laughter seem to show that patients and doctors might have different expectations regarding the building up of a relationship – in support of this I found in an earlier study (Holst, 1996) certain evidence in pragmatic strategies regarding the giving of excuses or explanations (such as where a student has to explain why the homework is late, or where the policeman has to give a reason with negative politeness in the UK context but this would be out of place in the Japanese context). Subsequent discussions with many Japanese people about these examples and my own observations of similar situations confirmed the initial analysis that reasons and explanations are expected in the English speaking context to alleviate the wrong-doing, possibly by bringing about some kind of sympathy on the basis of human fallibility, whereas in the Japanese context they are seen as adding insult to injury.

8.2.2 Cultural influences on the interactions

Patient-centredness and dependency

Before considering the relative effects of the institutional and the cultural setting it is useful to bring together two concepts that I have referred to during my discussion that are most relevant in Japanese medical encounters: 'patient-centredness', an aspect of the institutional framework, and '*amae*', an aspect of the cultural setting. Both of these concepts derive from a human relationship where there is an unequal power balance, and where the person with +power has more ability to influence the styles of an interaction. However, they differ in important ways. In a patient-centred consultation the doctor negates or mitigates the asymmetry in the institutional context, by using his/her institutional power to enable the patient to have more influence on the course of the interaction. Consequently, the asymmetrical power balance allows the doctor to make a consultation more or less patient-centred – this is a professional consideration the doctor makes in order to make the consultation as effective as possible. Meanwhile, in an *amae* relationship the inferior (*kouhai*) is dependent on the superior (*sempai*) for help and support, while the superior depends on the inferior to take care of his/her personal needs, which clearly is not the case in the medical encounter. Another important difference is the aspect of *amae* that is the dependency on pity, based on the speaker's pity for the hearer's plight, aroused through empathy. While pity may play some part in a doctor's personal feeling for a particular patient, it should not affect the way the doctor carries out his/her examination and diagnosis as he/she pursues the deductive process. In fact, throughout the Japanese data, through the structure of the consultations, through the questioning patterns and through their careful explanations of difficult information, the doctors can be seen to be focused completely on the medical task. They do not allow feelings to distract them from their goals. There is no *amae* relationship here; the doctor is an authority figure who is given that authority by his/her professional status. He is not the parent-like figure of the amae relationship that has a personal obligation to the patient beyond the confines of the consultation room as explained by Doi (1976).

Institutional influences on patient-centredness

At the end of the consultation, when the doctor has explained the illness and presented the patient with a set of treatment choices according to the appropriate patient-centred model the patient may still want the doctor to make the choice for him. To what extent is patient-centredness (i) desirable and (ii) achievable in the Japanese context? Regarding desirability, media interest (Sato 1999) and the growth in importance of communication skills in the medical curriculum (MHLW 2003) shows that there is clearly a demand by the Japanese public for better communication skills by doctors, and for doctors to

involve the patient more in the decision-making process. In the medical school at Hokkaido University, for example, there is now compulsory specialized training in communication skills where ten years ago there was none. As for achievability, the evidence from my study shows that patient-centeredness is an obvious and prevalent feature of these consultations, through the doctor's sensitive explanations of medical information, through his/her questioning style and in the way he/she uses backchannels to encourage the patient to give information (such as in the sequence from #65 in §5.3.3 where the doctor's gentle use of ee and ne↓ to backchannel empowers her by reinforcing her position as a crucial contributor to the diagnostic process).

While there are individual differences between doctors, and between the JDs and the SDs as a group, these consultations are conducted successfully according to all the patient-centred goals: careful and sensitive listening to the patient's story (chapter 5 & 6); collation of medical data from the patient's verbal account and medical tests (chapter 5); explanations of the procedures and test results in layman's terms (translating from the voice of medicine) (chapter 6); negotiation of the significance of the data with the patient and what the most likely diagnosis is (chapter 6); explanation of treatment options and inviting questions about what each of these options would mean for the patient; showing that the patient's input is valuable and necessary (chapter 6); and sensitivity to the fears and anxieties of the patient by avoiding being overly directive (chapter 7). What is more, running through all these aspects, there is a deep-rooted system of phases that is inherently patient-centred.

In chapter 4 statistics about turn length and utterance rate were analysed in an attempt to understand the dynamics of the interactions, to establish the different phases of the consultations and see how the participants signal the end of one phase and the beginning of the next. I paid particular attention to introductions and the closing phases. Introductions play an important role in establishing how patient-centred the consultation between the doctor and patient, whereas the closing phase is important in ensuring the patient understands and is committed to following the agreed upon course of treatment or the follow up tests. In this way it sets up the longer-term doctor-patient relationship.

My study suggests that within this particular Japanese institutional setting, the power asymmetry between doctor and patient shows itself in various ways that are similar to medical interactions in English speaking settings: there are expectations that (i) the doctor will direct the conversation; (ii) the doctor will have more rights to interrupt; (iii) there will be a series of phases, including a history-taking phase involving leading questions, and phases where the doctor explains information and gives instructions to the patient (iv) the doctor will not be expected to answer personal questions about him or herself, but the patient

will. If these factors are therefore common across the English and Japanese setting, what influence if any do cultural factors have? In my previous study, Holst (1996) into the transfer of Japanese pragmatic strategies into English by Japanese learners of English I suggested that in some situations learners were aware of pragmatic differences between the languages that went beyond phonetic, lexical and syntactical differences, and at times these learners modified their (Japanese) politeness strategies in order to adapt to their (variously accurate or inaccurate) understanding of politeness strategies in the target language. Power was one factor in this.

Gumperz has shown how in interactions between managers and subordinates in a business setting the power relation is affected by culture. Specifically, East Asians are not comfortable in arguing their own case in salary negotiations, whereas American managers expect subordinates to present assertive arguments about their own worth in order to persuade the manager to give a higher salary increase (Gumperz 1991). Meanwhile, Scollon claims that 'Japanese culture places a very high value on the communication of subtle aspects of feeling and relationship and a much lower value on the communication of information' (Scollon and Scollon 2001: 151). This view is reflected in the studies by Maynard and Barnlund, which have shown the prevalence of silences and non-verbal communication in Japanese casual conversation by students compared to casual conversation by American students. However, such behaviour may not be a universal feature of communication within that culture. The evidence from this present study suggests that cultural influences emerge in different ways in different speaking situations, and, specifically, the cultural effect on the interaction lessens in more institutional settings, where the basis of the conversation is the exchange of information in order to achieve a practical medical outcome that result in concrete actions. In this sense Japanese doctor-patient interactions may well be more like English doctor-patient interactions than they are like Japanese casual conversations, where there is no expected practical outcome, where there is no obvious power asymmetry between the participants, and where there is no standard structure in the form of phases. This would be measurable in the discourse through the prevalence of such features as directives, interrogatives, supportive backchanneling, topic shift markers or phase transition markers by one participant (the doctor) and not the other (the patient) in the medical consultations and the lack of such features in casual conversations. The phase structures, the types of questions asked, the careful patient-centred explanations by the doctor, or the insertion sequences by the patient in the closing stage to give voice to a concern are as much features of an English medical consultation as they are of a Japanese one.

Cultural differences detected in the consultations

Comparing the Japanese data with similar data from British GP consultations showed up cultural differences in behaviour regarding the emergence of laughter (§7.5). In what way does the examination of this data increase our understanding of communication in Japanese? A Japanese conversation should be characterised by ambiguity, and the avoidance of face threatening acts such as saying 'no' (Scollon and Scollon 2001: 51). Also, the patient would be expected to allow him/herself to be directed by the doctor, without challenging or asking for more information. However, there was much evidence in the data to disprove both these points. In the corpus there were 214 instances of 'no' (iie or iya) by patients in answer to a direct question and only 30 instances by doctors, which is odd if we expected the participant with higher status and therefore more psychological power (the *sempai*) to take less account of the other participant's face. Also, as can be seen from the statistics on patient-initiated insertion sequences at closure (§4.4.8), and patients' questions (§6.4.1) patients do interject and ask for information. What does this tell us about *amae*? In this relationship between doctor and patient *amae* should manifest itself as the doctor indulging the patient. This is not what we see in consultation #2, where a 50 year-old female patient displays irritation with the JD doctor in his twenties, and she refuses to answer the question about how many cigarettes she smokes (described in §6.2.2).

The Japanese doctor-patient relationship is not affected by *amae* in the same way as other relationships, teacher-student, parent-child, boss-subordinate, (for as long as both parties continue to be members of the same social groups). The main difference is that the latter are long term, and involve some kind of formal entry into the group, while the former is usually short–term, and it may be as short as one consultation. The institutional setting is more immediately relevant to these interactions than the cultural situation because, whatever the setting, the aims of the encounter have the same objectives and the roles of the participants are governed by a similar set of expectations: the power relationship is determined by simple fact that one of the participants has professional knowledge, and is the gatekeeper to treatment and the other is seeking help from him or her. This also determines who has the initiative at any particular phase of the consultation, not the cultural norms of local interpersonal interaction.

8.2.3 Differences between junior and senior doctors

Quantitative analysis showed that there were significant differences between the SD and the JD consultations. Analysis showed differences between junior and senior doctors with regard to the number of questions asked and the types of questions asked (in chapter 5). More patient questions in the SD interactions and fewer doctor questions in the JD interactions both

indicated patient-centredness in the encounter. Patient-centredness is achieved in both types of consultation, but through different means, according to the function, or aim, of each consultation. In the history-taking phase (predominantly JD) doctors combine question types to direct the patient to give the information they need and encourage the patient to keep talking and develop relevant details through backchanneling. The later phases of the diagnosis involve consideration of the medical information by the doctor and an attempt to involve the patient in this process (the domain of the SD consultations). In these encounters patient-centredness is achieved firstly by the doctor through sensitive explanations, so there is more doctor talk than in the JD consultations, and secondly through encouraging the patient to comment on or ask about the doctor's information, so there are more patient questions than in the JD consultations.

The different natures of the two kinds of consultation may thus account for differences in the doctor's questions and backchanneling behaviour. In addition the more experienced SD doctors are more confident and better equipped to use time efficiently to direct the patient.

Quantitative analysis of the doctor's use of backchannelling revealed there was evidence to suggest a relationship between the age of the patient and how much they spoke and how much the doctor spoke. In §6.4 I examined explanations by senior doctors, considering the register used as the doctor gauges patient's level of familiarity with the subject matter and the ability of the doctors to bring the patients into the negotiation process. Ten Have (2001) predicts that the patient would have more initiative in the JD consultations and the doctor would have more initiative in the SD consultations. The evidence of my statistical analysis of the proportion of patient utterances bears this out.

Finally, the data in §2.2.5 (doctors' use of '-te kudasai') showed that the SDs are much more directive and use time more efficiently. Is this just a feature of the SD consultations – less history taking, and more explanation and consideration of the medical information – or is it a matter of experience and on the job training, or can the skills be taught beforehand as part of the medical curriculum? Or indeed, are good communication skills dependent on the personalities of the doctors themselves? Mukohara's (2004) evaluation of their own communication skills course has shown that communication skills training in Japan do succeed, at least to a limited extent. I hope this study will provide more evidence to help refine future courses in Japan to make them even more effective.

8.3 Methodological considerations

In this section I return to my discussion in §3.7 about combining quantitative and

qualitative analysis, and about bringing contextual information to bear in CA. Since this is how I have proceeded in my own research, I want to assess how useful or effective my methodology has been. Given the regularities of doctor-patient interactions the researcher can collect much relevant and valuable data in a relatively short space of time. Once transcribed, this data is easily inserted into a corpus, giving immediate access to lexical patterns (such as word collocations and word frequency) across the data or within and between selections of it. In this way I have been able to quantify such aspects of the Japanese data as questioning patterns, backchannelling and laughter, which I could compare directly. However, as McEnery and Wilson write, for statistical purposes classifications have to be hard and fast, which results in a less rich picture of the data than can be obtained from qualitative analysis. On the other hand, one limitation of qualitative approaches is that their findings cannot be extended to wider populations with the same degree of certainty that quantitative analyses can (McEnery and Wilson 2001). In this investigation into talk-in-interaction in institutional settings, I have tried to combine concordance searches, in order to count the prevalence and spread of linguistic features, with a qualitative analysis of those features in context. CA isolates interaction to the most immediate local context (the turn sequence). For this reason, it has been my method of choice in attempting to understand the dynamics of Japanese Doctor-patient conversations by asking 'why that now?'

Using CA allows a researcher to examine power asymmetry within the text itself, without drawing on the situational information that may or may not underlie the encounter. Or as Schegloff writes: "It is not for us to *know* what about context is crucial, but to *discover new sorts* of such things … to discover them in the members' worlds, if they are there" (Schegloff 1992: 128). In this way, through looking at the data in a context-neutral way, whatever influences underlie the encounter – institutional, personal or cultural – will emerge through the sequential analysis at the local level. However, in practical terms this is very difficult to achieve. If the researcher makes no presuppositions about the data, he/she will be able to make analytic statements about the utterances and the sequence of turns, but he/she will not be able to make any statement of fact beyond the immediate text unless he/she uses his/her world knowledge to interpret the text: Who might the speaker be?; In what situation might the participants be talking?; What might their purpose in talking be?; What institutional factors might govern their turn-taking rights?; What are the linguistic restraints on the language? The analyst cannot avoid bringing to bear his/her knowledge of the world, and more specifically in the case of these medical interactions, knowledge that appears to relate most directly to doctor-patient consultations in Japan. All the terms would have to be defined before they were applied, but since the terms themselves should be data-driven, how could

they be defined beforehand? In other words, before any analysis can take place there has to be some discussion of the setting, including a discussion of what might be expected of any interpersonal interaction between two Japanese participants.

Maynard argues that a 'pure' CA approach of context free analysis is basically impossible, as every CA concept has to be based on interpreting the text according to our knowledge of the real world (Maynard 2003:64-87) The researcher has to assume the data under analysis has such features as 'conversation', 'participant', 'turn', adjacency pair', and we have to bring our own knowledge of the language being used in order to interpret what each participant is saying when they say it at a particular point. The question then is how much context can the researcher bring to bear, without compromising the CA goal of understanding the utterances at the local sequential level? This goal is an important antidote to a top-down theory-laden approach that promotes a particular agenda by identifying selected data that lends support to their case.

On the other hand, over-reliance on contextual information defeats the object of analyzing a conversation for what it is at a local level: we would be in danger of explaining everything within the framework of our cultural theorising, no matter how far we have to stretch our concepts to accommodate the behaviour and utterances that occur. A hypothesis that states that every conversation is affected by the cultural background of the participants will be self-confirming – it will always interpret the utterances of conversations under those assumptions, and therefore tell us nothing new. Are we therefore to be top-down rationalists who end up confirming our view of the universe because we have already defined how everything in that universe is arranged (all conversations conform to particular rules and each new conversation confirms these rules)? Or should we be bottom-up empiricists who can take a detailed snapshot of events but are unable do or say anything beyond admiring the appearance of each unique circumstance (since no two conversations are exactly alike). This is what Thomas and Wilson refer to when they write of combining the ‘fishing expeditions’ of CA, with the statistical analysis of corpus word searches (Thomas and Wilson 1996: 107), and this is what I have attempted to do in my own research.

8.4 Procedural limitations

As explained in detail in Chapter 3 I faced a number of limitations in both the collection of and transcription of the data (§3.6) and in its analysis (§3.8). Regarding the data itself, although I had originally wanted to collect data from a number of small clinics in the Sapporo area, there was a big problem in getting the agreement of the doctors I contacted to make recordings. Firstly, my own work situation meant that I had no regular contact with

doctors, so I had to approach them as an unvetted outsider and secondly, these doctors had no prior experience of recording their consultations and they were therefore worried about the legal implications regarding patient consent. If I had wanted to pursue this avenue I would have needed to contact the governing body for doctors of internal medicine in Hokkaido, present my project and then get official sanction to approach individual doctors directly. The alternative possibility opened up through my contacts with the medical school at Hokkaido University, and I was lucky to gain the support of the professor in charge of a large intenal medicine department.

However, although this gave me a great opportunity as regards getting a large number of recordings in one discrete setting in a short space of time, there were a number of disadvantages of this. The data would be limited by this setting – a large public hospital, where many of the patients were being referred, and where there was no history or ongoing relationship between doctors and patients. Small clinics where there is an existing relationship between doctor and patient would provide a different setting to make a comparison regarding, formality and familiarity between the patient and doctor, with similar data from other language settings, which is much more common in the literature. I was also unable to discuss the recordings directly with the doctors participating, either before the recording process (the professor explained it in his weekly meeting) or afterwards. I wanted to meet all the doctors beforehand to stress the importance of keeping the recorder on at all times, and given them an opportunity to ask me questions directly about research aims. As it turned out, some of the SDs failed to record the opening phase, which, as I explained in Chapter 4 is a crucial moment insetting the tone of the consultation. A pilot study of one or two consultations with patient volunteers would certainly have helped identify this problem, but I was unable to set this up in time, A pilot study would also have enabled me to discuss any concerns or technical problems that the doctors might have had with the recorders. However, on all four days of the recordings no problems were reported to me by the doctors, some of whom handed the recorders over to me personally at the end of the outpatient session.

Post-recording meetings with the doctors would have given me the opportunity to ask specific questions about the data, or their understanding and attitudes towards consultation style. In other words I missed a good opportunity to triangulate the research with the doctors, because I had not planned for this with the professor beforehand, and in the period immediately after the recordings I had no contact with the individual doctors. In addition, I did not make a questionnaire for patients to find out their feelings of their consultations. A patient questionnaire would have given a valuable extra strand to this research regarding

patient-centredness and the communication style of the doctors; the fact that they had already been approached and volunteered to give their consent means it would have been highly likely that they would have agreed to fill in a questionnaire before leaving. So, while I was satisfied with the number and the quality of the recordings I got, I had no input from either of the parties involved in the recordings, On the other hand, the CA style analysis and the quantitative approach I used to establish discourse patterns do not rely on comments by participants.

A second limitation of the data was that it was only audio, since I was unable to video record the consultations. As explained in §3.6.4 I did not ask for permission to make video recordings, but given the more intrusive nature of a camera (creatinging an increased risk of the observer's paradox), I felt that audio would give me more authentic data, even though I would lose all non-verbal information, which would limit the analysis could do: there are many pauses and noises that I cannot interpret with certainty, and there are many other features of the conversations to which I have no access at all (e.g. glances, shifting of posture, etc.). While early studies of doctor-patient interactions were carried out using only audio recordings, more recent studies are commonly recorded on video. Nevertheless, my focus was on verbal behaviour rather than on recording a complete communicative experience, and the audio recorders proved powerful enough to capture almost all the utterances clearly enough to enable accurate transcriptions. These audio recordings have thus yielded much valuable information, and they have the potential to yield much more information under further analysis. In addition, the small audio recorders were largely inobtrusive, and they were very easy for the doctors to start and stop should he/she or the patient feel uncomfortable at any moment and need to turn them off. In the end, the benefits of unobtrusiveness, authenticity, convenience and high sound quality outweighed the loss of non-verbal information.

Regarding the analysis, as with any natural conversation data accurate transcription depends on the quality of the recording, and decisions made about what to include and what to omit. In general the recordings were clear enough, because the recorder was usually within one meter of the two participants, so even faint mumbling was usually picked up. However, during sequences of rapid interaction, where many overlaps occurred, it was not always possible to hear both speakers utterances. Such places were transcribed as 'unclear'.

8.5 Implications and Future Research

This research is intended to be of interest to researchers of inter-cultural or cross-cultural communication, to language teachers, and to those involved in the development of communication skills of medical practitioners. Despite the specific institutional setting of this

research, I hope the findings will add to the ever-growing body of research into verbal communication, especially the fields of conversational analysis and corpus based linguistic study. I hope in turn that they will have practical classroom implications for those working in such areas as teaching English for medical purposes.

Through my examination of the Japanese consultations it can be seen that culture specific concepts such as *amae*, which attempt to explain interpersonal communication in Japanese society, must be regarded in a more nuanced way. The doctor-patient interaction in any society has aspects of dependency, which is shown through patient-centeredness, but patient-centeredness is not the same as the Japanese specific concept of *amae* as I have explained it here; it is an institutional factor that is found across cultures. *Amae* does not work in the doctor-patient relationship in the same way it does in the mother-child relationship, or the *sempai-kouhai* relationship. If nothing else, general statements about national cultures, and their impact on communication studies needs to be taken with some caution: the evidence I have presented here suggests that the institutional setting of the medical consultation has more influence on the behaviour of the participants than 'general' cultural norms of interaction. One reason for this could be that, at least in the first meeting between doctor and patient, there is an aspect of a service encounter, which means that the doctor and the patient are not in the same 'in-group', and therefore have no hierarchical relationship of dependence, or as Scollon and Scollon (2001) wrote, '… Asians tend to be more aware of the connections they have as members of their social groups, and therefore, they tend to be more conscious of the consequences of their actions on other members of their groups.' (ibid: 147). A doctor-patient relationship is not a group relationship in the sense that both participants are members of the same group, and it may not even be a very long term relationship, so the responsibility the two parties have to each other is not a cultural one, it is a professional one.

Another aspect of the meeting as a service encounter is that, as I explained in §8.2.1, in most urban areas in Japan, the patient can choose her doctor from among many competing clinics and hospitals, so if the patient does not get the treatment he or she desires with one doctor it is often easy to abandon that doctor and take her problem and her money to another doctor to get a second opinion. This may well have been what the young female patient in consultation #4, who I introduced in the first chapter of this thesis decided to do after it became clear to her that she would not be able to get the medicine she thought she needed to relieve her symptoms. Even though the junior doctor asked her to wait in the waiting room for the follow up examination it is uncertain that she actually stayed for further treatment, as she is one of the few JD patients that did not also appear on a subsequent SD recording (5 out of 35).

If a patient does continue with the course of treatment offered and agreed upon at a particular hospital with a particular doctor we would certainly see the appearance of more social talk, but we might also see the development of a *amae*-like relationship which shows aspects of dependency seen among members of Japanese social groups. That is beyond the scope of the present research, but it might be possible to investigate it in a further study of doctor and patient interaction during long-term treatment, to determine if there is a movement from institutional talk to talk, which exhibits more cultural aspects of interpersonal communication.

Further study is also needed into the emergence of patient insertion sequences during doctor's explanations and at closings. These appear to be a strong indicator of patient-centredness. It would be interesting to compare the data here with data from small clinics where there is an ongoing relationship between D and P, in order to see whether social distance, rather than power distance, influences P's wllingness to initiate an insertion sequence, and how D's response infuences P's to pursue it or not.

Further research is also needed into the effect of institutional settings on talk in other service or professional talk in Japan. For example, it would be worthwhile to determine the degree of phatic talk in other Japanese professional discourse, such as in business negotiations or professional-client encounters involving consultations (e.g. lawyer-client) to see how they compare with the focused questioning I have described in medical consultations. First, business negotiations involve encounters between two groups, where the speaker has to direct his/her utterances to the in-group listeners on his/her own team and the out-group listeners on the opposite team. In the Japanese context these encounters are likely to be as non-contentious as possible in order to avoid any loss of face on either side. For this reason, such meetings might be expected to be formulaic, and the most contentious issues would be dealt with previously (described by the Japanese expression *nemawashi* – 'preparing the ground') before the two groups sat down together in a formal meeting. Second, the interplay between institutionality and culture might be explored further by examining asymmetry in Japanese professional talk, such as that between lawyers or other consultants and their clients. This would deepen our understanding of *amae* in institutional settings beyond the findings I have made in Japanese medical consultations.

Finally, one way of determining the cultural and institutional effects beyond the Japanese setting would be to extend the method of Ohtaki et al (2003) by carrying out studies comparing similar sets of doctors and patients in different countries. For example, rural practices in Japan, the UK, Germany, China, where doctors and patients are the same age, sex and where the patients have similar social backgrounds to each other. Such a study using

video recordings would provide institutional evidence that could be compared with a second set of data of doctor-patient encounters in the same countries with the same sets of participants, but in different conversational settings with varying degrees of social distance. In this way it could be discovered how the conversational dynamics are affected.

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APPENDICES

Appendix 1a Summary of Byrne & Long's four diagnostic styles

Patient-centred <==========		Doctor-centred ==========>	
USE OF PATIENT'S KNOWLEDGE AND EXPERIENCE			USE OF DOCTORS SPECIAL SKILL AND KNOWLEDGE
SILENCE LISTENING REFLECTING	CLARIFYING & INTERPRETING	ANALYSING & PROBING	GATHERING INFORMATION
Offering observation	Broad question	Direct question	Direct question
Encouraging	Clarifying	Correlational question	Closed question
Clarifying	Challenging	Placing events	Correlational question
Reflecting	Repeating for affirmation	Repeating for affirmation	Placing Events
Using the patient ideas	Seeking patient idea	Suggesting	Summarising to close off
Seeking patient ideas	Offering observation	Offering feeling	Suggesting
Indicating understanding	Concealed question	Exploring	Self-answering questions
Using silence	Placing events	Broad question	Reassuring
	Summarising to open up.		Repeating for affirmation
			Justifying self-chastising.

(Byrne and Long 1976: 103)

Appendix 1b Summary of Byrne and Long's Seven Prescriptive Styles

	Patient-centred <==========>				Doctor-centred <==========>		
	USE OF PATIENT'S KNOWLEDGE AND EXPERIENCE						USE OF DOCTORS SPECIAL SKILL AND KNOWLEDGE
Style (Cases)* / **Behaviour**	**1** (624) 33%	**2** (680) 36%	**3** (57)** 3%	**4** (279) 15%	**5** (159) 8%	**6** (74) 4%	**7** (22) 1%
Giving Information		✔	✔	✔	✔	✔	
Giving opinion				✔	✔		
Directing	✔	✔	✔	✔			
Advising				✔	✔		
Clarifying					✔		
Reflecting					✔		✔
Exploring					✔		
Answering patient questions				✔		✔	
Reassuring			✔				
Encouraging							✔
Seeking patient ideas			✔	✔	✔	✔	✔
Indicating understanding				✔			
Using patient ideas				✔	✔	✔	✔
Offering collaboration					✔		
Summarising to open up						✔	
Pre-directional probing						✔	
Terminating (indirect)					✔	✔	
Terminating (direct)	✔	✔	✔				

* (T= 1895) ** (+ 70 cases as a "backup" style)

Style Descriptions (abridged from B&L – 106-112)

1. Doctor makes a decision about the patient and his treatment and then instructs the patient to seek some service. (It tells P absolutely nothing about his condition, but does indicate that something is wrong because consequent actions have to be taken).
   e.g. "*Well now, take this along to the chemist. Take them three times daily after meals. 'Bye bye*"
2. The doctor makes his decision and announces it. (Strong endings, but at least the doctor tells the patient what is causing his/her suffering)
   e.g. "*Well now, you seem to have nothing but a bout of influenza. Take this to the chemist on your way home …*"
3. The doctor sells his decision to the patient. (Mainly from one particular doctor)
4. The doctor presents a tentative decision subject to change. (Involves patient marginally in his treatment.)
5. The doctor presents the problem, seeks suggestions and makes decisions. (Variable style: more consultative, but can conclude with strong termination.)
6. The doctor defines the limits and requests the patient to make a decision. (Used as primary strategy in 35 cases and as a secondary strategy after failing with Styles 1 or 2 (39 cases).)
7. The doctor permits the patient to make his own choice. (Maybe good for hypochondriacs or for patients with some kind of emotional problem the doctor can't deal with)

Appendix 2 1st Department of Internal Medicine History–taking Guidance

History taking (especially in relation to respiratory disorders)

(Translation of 病歴の取り方, 1st Dept. of Internal Medicine, Hokkaido University Hospital)

Main areas: Present illness; previous illnesses; illnesses in the family; lifestyle; work history/environment

It takes a long time to do an interview because the doctor cannot understand exactly what the illness is. So it is not clear what he has to ask the patient. Refer to these books about diagnosis: (… … …)

Main Complaint

First, find out the reason for coming: "どうなさいましたか？' 'どうしましたか？'
When the doctor finds out some conditions s/he should write them down in medical terminology in the patient's chart.

Present Illness

Determine if the patient has had a previous illness. Write down "From about …(time). The patient went to X hospital with Y illness."

Chest pain

a) Condition - breathing – rapid, gradual, in normal circumstances, when doing exercise or sport
b) What part of the body
c) Degree of pain (constricted, prickly, increases with breathing, increases at work)
d) Time (how long does the pain last?) – less than 5 minutes, continuous, gradually getting better
e) Frequency of pain – how many times a week, day? No pain for a long time?

Breathlessness

a) Condition – since when?; sudden?, gradual?, etc.
b) Degree – e.g. some people feel breathless when they climb stairs, do heavy work – don't forget Hugh-Johns scale).

Noise in respiratory tract

a) Condition – how about when the patient is in good condition; season; work; environment; what time of day is worst; with or without sputum?
b) Existing treatment – inhaler, drip, bronchial dilator, steroids, etc.

Palpitations

a) Condition - breathing – rapid, gradual, in normal circumstances, when doing exercise or sport.
b) If the patient has taken his own pulse, what is the rate? Is it regular or irregular?

Cough, Bringing up sputum

f) Colour/smell – white, yellow, green
g) Quantity – ask patients who are bringing up a lot how much of a cup would it fill, or how many times a day. What time of the day? Do they have a bad nose?

Whether the patient has a cough with sputum or not, - is the cough spasmodic, gradual, stable, does it occur during sports. On what occasions does s/he have no symptoms? When is the main time of the day? Does the patient have low blood pressure?

Bloody sputum and spitting blood

Ask the same questions as in the previous section (cough), but also note that this is a different diagnosis and ask extra questions:

- is the patient spitting blood with the cough
- what colour is it?
- How bloody is the sputum – completely? With bloody lines?

Fever

a) degree – slight or high?
b) Type

<u>When a patient's X-ray reveals an abnormality</u>

This situation happens quite often in respiratory medicine. In this case the doctor should check:

(i) the patient's previous diagnosis/condition
(ii) recheck the information from the original interview.

<u>NOTE!</u>

Making notes – write down information about the present condition, any previous conditions and symptoms the patient doesn't have now, but that the doctor feels it is important to note. Write like this:

"Now s/he has no … … … "

e.g. When the patient has a cough the doctor has to decide if it is with or without sputum. Thus

(i) "The patient has a cough without phlegm"
(ii) "There is a cough"

These two sentences are very different.

Previous Illness

- Don't write which year, instead write how old the patient was when it happened
- Pay attention and write down about any of the following illnesses: chest diseases, respiratory diseases, sinusitis, atopic dermatitis, allergic conjunctivitis, nettle rash, chest hospitalization operations, blood transfusion, esp. virulent diseases.

Family history

Up to parents and grandparents –alive or dead? Cause of death, age at death, heredity – any infections, diseases common in the family, allergy, diabetes high blood pressure, strokes, menta illnesses, hepatitis, polyposis, ATL.

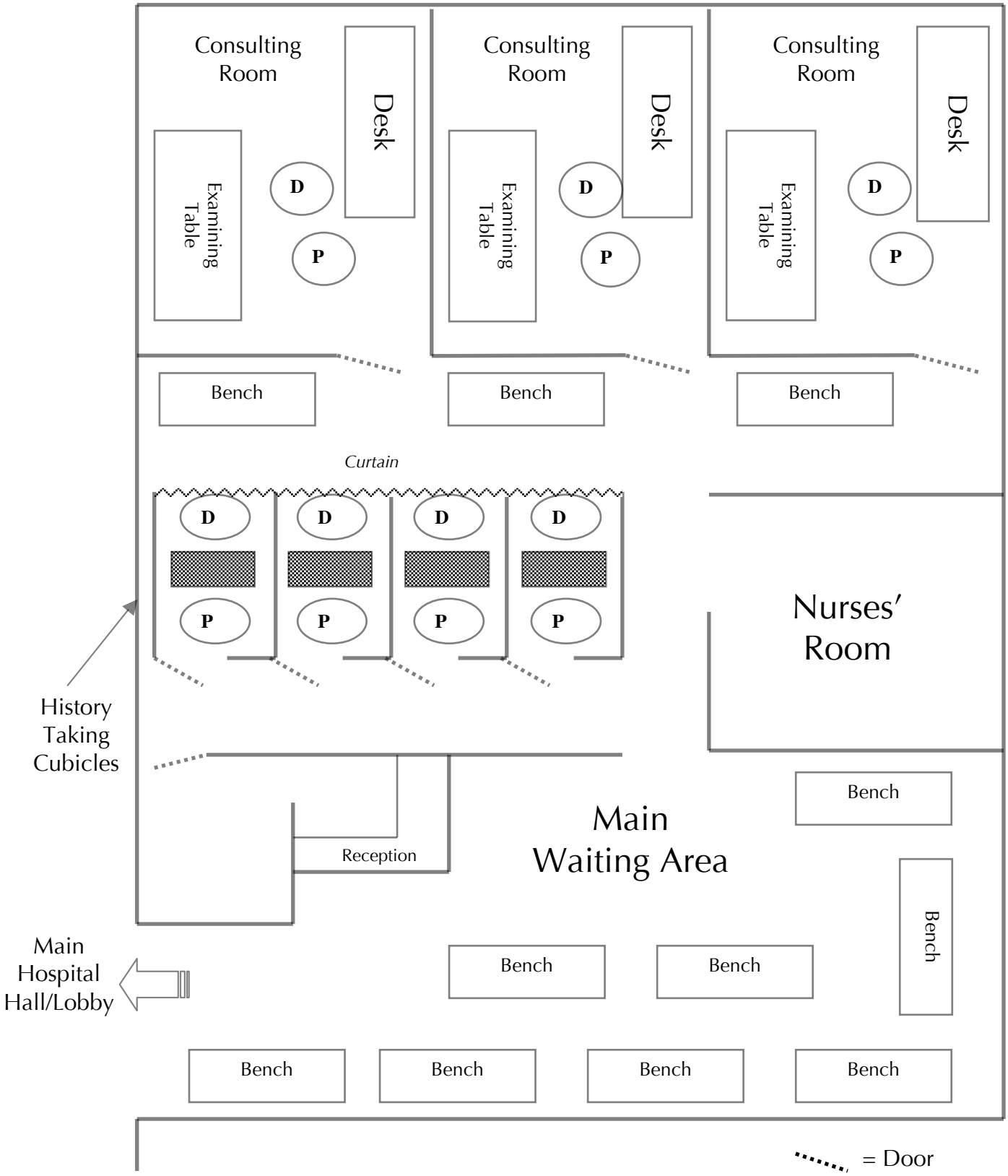
Lifestyle

Smoking – (how many a day? from (age) to (age)?); alcohol; tastes (what foods does the patier like?); any current medication; allergies/bad reactions to medicines; inoculations, BCG

Work History/Environment

Especially exposure to dust, poisonous gas; specific contents; toxic chemicals; (how long for?) relation between exposure and illness whether colleagues have the same condition.

Appendix 3 Sketch of the First Department of Internal Medicine, Hokkaido University Hospital



Appendix 4 Patient Record

医者患者会話検査

患者情報

平成１３年　　月　　日　　医者 _____

呼吸器予診（レコーダー2A）❒　呼吸器診察（レコーダー2B）❒

消化器予診（レコーダー3A）❒　消化器診察（レコーダー3B）❒

代謝予診　（レコーダー4A）❒　代謝診察　（レコーダー4B）❒

			（第三者）	
患者	性別	年齢	性別	患者との関係
1	男　女		男　女	
2	男　女		男　女	
3	男　女		男　女	
4	男　女		男　女	
5	男　女		男　女	
6	男　女		男　女	
7	男　女		男　女	
8	男　女		男　女	
9	男　女		男　女	
10	男　女		男　女	
11	男　女		男　女	
12	男　女		男　女	

Appendix 4a Patient Record

Doctor-Patient Conversation Research

Patient Information

2001 Month Day **Doctor**_____

Respiratory Interview（Recorder 2A) ❒ Respiratory Exam (Recorder 2B) ❒

Gastrointestinal Interview（Recorder 3A) ❒ Gastrointestinal Exam (Recorder 2B) ❒

Metabolic Interview（Recorder 4A) ❒ Metabolic Examination (Recorder 4B) ❒

			(Third person)	
Patient	**Sex**	**Age**	**Sex**	**Connection to patient**
1	M F		M F	
2	M F		M F	
3	M F		M F	
4	M F		M F	
5	M F		M F	
6	M F		M F	
7	M F		M F	
8	M F		M F	
9	M F		M F	
10	M F		M F	
11	M F		M F	
12	M F		M F	

Appendix 5: Patient Consent Form

医師と患者による会話の言語構造調査
説明書

１．　なぜこの研究が必要なのでしょうか？
医師と患者のコミュニケーションをより良くするためには、医療現場で使われていることばを調査することが必要だからです。

２．　どのように調査するのでしょうか？
医師と患者の会話を出来るだけ多く録音し、そのテープを分析します。

３．　この調査で、私は何をしなければならないのでしょうか？
診察前に医師との会話を録音することに同意していただくだけです。他は何もされる必要はありません。

４．　プライバシーについて
あなたのプライバシーに関することがら（名前、住所、電話番号、会社名など）は一切公表されません。

以下に、この研究・調査の内容についてご説明致します。よくお読みになった上で、十分にご検討ください。ご不明な点がございましたら、こちらの書面を渡したアシスタントにお尋ねください。この調査に関するどのような質問にもお答え致します。その結果、この調査・研究にご協力いただける場合には、書面の最後に同意の署名・捺印をしてくださるようお願いいたします。

１．　研究の目的について
患者と医師がどのようにしてコミュニケーションをとるかを知る最善の方法とは、出来るだけ幅広く、出来る限り多く、医師と患者の実際に行われた診察中の会話を録音することです。この方法により、医師と患者が互いに、どのように質問し、情報を伝えるか、また共通する表現が何であるか、更にコミュニケーションを困難にするような状況があるのかどうかを理解することができます。
患者にとって医師への病状の説明が簡単であればあるほど、医師にとっても対応が容易になります。

２．　調査方法
診察室に入る前に、医師には、この調査に対するあなたの同意の有無が知らされます。同意されなかった場合には、診察中録音されることはありません。同意された場合、診察室に入室する前にテープレコーダーで録音が開始されます。診察中も録音は続き、診察室を出た後、医師が録音を停止します。従って、診察中テープレコーダーの操作について考える必要はありません。

３．　調査終了後について
- 録音後、テープを聞き、それを会話通りに文字化します。
- 会話を文字化した後、全ての会話を同時に調査できるようコンピューター上のデータベースに入力します。
- 研究結果は、日本及び海外の学術雑誌で発表させていただく予定です。これは医学関係者に対し医師と患者のコミュニケーションについて広く知らせるためです。

４。プライバシーについて

- あなたについて公表される情報は年齢と性別のみです。あなたの名前も医師の名前も使用されることは決してありませんし、この調査で記録に残ることも一切ありません。会話は以下のように記 載されます。

> *医師6　：　おはようございます。Xさん。どうしましたか？*
> *患者33　：　先生、おはようございます。ちょっと体の調子が・・・*

- 研究者に録音テープがわたる前に、北海道大学の音響技師はあなたに関する個人情報（例えば名前や住所）を全て消します。従って、医師も患者も誰であるのかは誰にもわかりません。
- この研究は、本来の治療とは全く関係がありません。プライバシーについては保護されますのでご質問等ありましたら、ためらわずにすぐご連絡ください（連絡先は下記をご参照ください）。

また、診察中、録音することに不安を感じましたら、すぐにご自身で録音を停止することができます。あるいは、医師に録音中止を求めることが出来ます。この調査への協力に一度同意していただいた後でも、録音を強制されることはありません。帰宅された後で、気持ちが変わられた場合にも、こちらまでご連絡ください。録音は消去され、今後、研究に使用されることは一切ありません。

この研究では診察中の会話を録音することが最も重要です。従って、調査にご協力いただいた方に後日再びご迷惑をおかけすることは一切ありません。

この研究は、大変重要であり、多くの方が興味を持ってくださることを期待しています。収録数が多ければ多いほど、より正確に言語を理解することができます。帰宅後、この研究について疑問を感じられた方は、下記までお問い合わせください。

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この調査･研究は北海道大学医学部附属病院の倫理委員会の承認の下に行われているものです.

（見本）　　同　意　書

平成　　年　　月　　日

北海道大学医学部附属病院長　　殿

このたび、「日本における診察時の医師と患者による会話の言語構造調査」、別紙説明書に記載された項目について、詳細な説明を受け詳細な説明を受け、了承しましたのでその実施に同意します。

氏名　　印

または親権者 氏名　　印

上記患者に対し、別紙説明書の内容等について私が説明し、了解されたことを確認します。

平成　　年　　月　　日

担当医師　　印

Appendix 5a – Patient's Consent Form (Translation)

Investigation into the structure of Japanese doctor-patient conversation

Description

1. Why is this research being carried out?
Investigating the language used in medical consultations is needed to improve communication between doctors and patients.
2. How is the study being carried out?
A large number of doctor-patient conversations are recorded, and analyzed.
3. What do I need to do for this study?
Before your consultation with the doctor you need only to agree to have your conversation recorded. You do not need to do anything else.
4. About privacy
Any information concerning your privacy (name, address, telephone number, company name, etc.) will not made public at all.

The details of this research and investigation are explained below. Please read them carefully and examine them well. If any points are unclear please ask the assistant who gave you the document. He/she will answer any questions concerning this investigation. As a result, if it is possible for you to cooperate in this investigation and research please sign and stamp the agreement at the end of the document.

1. Aims of the research

The best method to establish how patients and doctors communicate is to record, as many conversations as possible between doctors and patients during actual consultations. In this way it can be understood how the doctor and the patient each ask questions and impart information, and in addition, whether there are any situations in which communication is made difficult.
The clearer the patient explains his/her condition to the doctor, the easier it is for the doctor to do his/her job.

2. Research Method

The doctor is informed of your assent to this investigation before you enter the consulting room. <u>If you do not give your assent no recording will be made during the consultation.</u> If you have given your assent the tape-recorder will begin recording before you enter the consulting room. The recording continues throughout the consultation until after you leave the consultation room, and the doctor turns off the recorder. Therefore, it is not necessary to think about the operation of the tape-recorder during the consultation.

3. After the recording process

- After the recording has been made the tape will be listened to and a transcription will be made according to the conversation.
- After your conversation has been transcribed it will be entered into a computer database so that it can be examined together with all other conversations in this study.
- It is intended that the results of this research, will be published in academic journals in Japan and overseas. The purpose of this is to make the findings as widely available as possible to other researchers interested in doctor-patient communication.

4.Your privacy

- The only information made public about you is your age and sex. Neither your name nor your doctor's name will be used, and this information will not remain on any records of this investigation. The conversations will be transcribed as in the following example:

> *Dr.6：* *Good morning Mr. X. What brings you here today?*
>
> *Patient33：* *Good morning doctor. Well, my condition is …*

- A sound engineer at Hokkaido University will delete your personal information (e.g. name and address) before handing over the recording to the researcher. Therefore, no one will know the identities of either the doctor or the patient.
- This research is quite unrelated to any treatment you may undergo. Your privacy is protected so please contact me immediately and without hesitation if you have any questions. (For contact details please refer to the information below).

Moreover, during the consultation you can stop the recording at once should you feel insecure. Alternatively, you can ask the doctor to discontinue the recording process. Even after you have agreed to cooperate in this investigation, you are not at all compelled to be recorded. If you change your mind after you get home, please contact us here. The recording will be deleted and it will not be used in any way in any further research.

The most important aspect of this research is to record the conversation during the consultation. Therefore, the people who cooperate in the investigation will not be troubled about it again at any later date.

Many people are expected to be interested in this important research. The greater the number of conversations that can be collected, the more accurately the language can be understood. Please contact one of the following people if you have any doubts about this research after you get home.

Mark Holst Center for Language Studies, Otaru University of Commerce
Tel/Fax:

Dr. _____ 1st Department of Internal Medicine, Hokkaido University Hospital
Tel:
Fax:

Dr. _____ 1st Department of Internal Medicine, Hokkaido University Hospital
Tel:
Fax:

This investigation and research is being carried out under approval of the ethics committee of the attached Hospital of the Department of Medicine at Hokkaido University.

Year Month Date

Hospital Director, School of Medicine, Hokkaido University _____

At this time, having been given a detailed explanation of the item described in "Investigation into the structure of Japanese doctor-patient conversation", and having also received and acknowledged the detailed explanation on the attached paper, I therefore consent to the procedure.

Name: STAMP

OR Legal Guardian's Name: STAMP

I confirm that I have explained the contents of the attached paper to the above-mentioned patient and that he/she has consented.

Year Month Date

Doctor in charge STAMP

Appendix 6 Transcription Symbols

[marks *overlapping* talk

```
D:   oh I [see
P:        [yes, I'm glad you like it.
```

= indicates that talk is *latched*; there is no interval between the end of a prior turn and the start of the next turn

```
A:   and I told him =
B:                  = you (.) you're not very happy are↑ you
```

(2.0) marks pause, silence (in tenths of second)

```
D:   um: (1.5) do you like toast↑
```

(.) indicates a micropause (less than 0 5 secs)

```
D:   he (.) he went to the market yesterday.
```

((*coughs*)) indicates non-verbal noise, behaviour OR comment by the transcriber, not on the recording

```
P:   is it serious doctor↑
D:   ((shakes head)) it's all right↓
```

↑ indicates a rise in pitch

```
B:   what↑
```

↓ indicates a drop in pitch

```
A:   oh no↓
```

hh, hee, hah, heh indicates laughter or breathiness

```
D:   you'll soon be fit enough to run a marathon
P:   heh heh hh (.) doctor you must be joking
```

! denotes emotion

```
P:   you can't be serious!
```

<u>dog</u> underlining marks emphasis

```
D:   take <u>three</u> pills after breakfast (.) and <u>two</u> after dinner (.5) OK↑
```

HUH capitals mark increased loudness

```
A:   put your coat on the chair NO NO (.) NOT OVER THERE that's my
     hamster cage.
```

° marks talk which is softer, quieter

```
A:   and then (.) a car came round the corner °and ran over my cat°
```

: indicates that the preceding sound has been lengthened

```
B:   um:: what's you're name
```

> < indents mark speech which is compressed, faster

```
A:   john (.5) >don't stand on the floor I've just washed it!<
```

< > marks speech which is hesitant, slower

```
A:   freddie (.5) <don't move (.) there's a tarantula on your shoulder>
```

(…) indicates unclear or inaudible speech that can not be transcribed with certainty

```
A:   ingrid is (... minded so she ...)
```

Appendix 7 Overview of the data

Rec.#	Date	D.	D. Sex	P	P. Age	P. Sex	3rd Per	Complaint	Referral	Length	Words	Turns
1	Sept9	A5	M	1	74	F	●(r)	Breathing stopping/ losing consciousness		11'48"	2678	436
2	Sept9	A5	M	2	52	F		Chronic coughing	● (L)	19'22"	3439	488
3	Sept9	A5	M	3	65	M		Stomach cancer		20'02"	4416	504
4	Sept9	A5	M	4	20s	F		Cough/flu	● (L)	6'50"	1136	173
5	Sept9	B5	M	1	74	F		Breathing stopping/ losing consciousness		9'50"	1113	134
6	Sept9	B5	M	5	29	M	●(r)	Fever & snoring/breathing probs in the evening	● (L)	12'34"	868	120
7	Sept9	B5	M	6	56	F		Asthma has got worse		8'10"	726	71
8	Sept9	B5	M	7	56	M		Breathing painful for a week		22'17"	2154	143
9	Sept9	B5	M	2	52	F	●(n)	Chronic coughing	● (L)	16'14"	1276	133
10	Sept9	B5	M	8	25	M		Coughing since last week		7'13"	778	58
11	Sept9	A2	M	9	32	M		Fever since 12 days ago		8'48"	1274	160
12	Sept9	A2	M	7	56	M		Breathing painful for a week		10'12"	1514	191
13	Sept9	A2	M	6	56	F	●(r)	Asthma has got worse		10'03"	1264	177
14	Sept9	A2	M	8	25	M		Coughing since last week		5'40"	810	126
15	Sept9	B3	M	9	32	M		Fever since 12 days ago		23'40"	3607	419
16	Sept9	B3	M	10	75	M		Colon cancer (polyp) of 2 years has started to grow/spread	● (L)	7'47"	1587	210
17	Sept9	A1	M	10	75	M		Colon cancer (polyp) of 2 years has started to grow/spread	● (L)	12'32"	1732	198
18	Sept9	A1	M	11	38	M		Blood sugar & pressure is high		19'56"	3177	238
19	Sept9	A1	M	5	29	M	●(r)	Fever &snoring problem	● (L)	11'46	1431	188
20	Sept9	A1	M	12	52	M		Breathing problem & tiredness		11'38"	1688	136
21	Sept9	B6	M	11	38	M		Need to lose weight		35'09"	3599	178
22	Sept13	A4	M	13	27	M		Stomach pain for 2 weeks		8'23"	840	118
24	Sept13	A4	M	15	67	M		Chest/circulatory problems - wheezing (inpatient)	*	19'09"	1728	217
25	Sept13	B1	M	14	51	F		Breathing difficulties for 30 minutes		11'36"	1012	122
26	Sept13	B1	M	16	50	F		Acute inflammation if the bronchial tubes	*	11'03"	824	57
27	Sept13	B1	M	16	50	F		Acute inflammation if the bronchial tubes	*	5'56"	1285	132
28	Sept13	B1	M	14	51	F	●(n)	Breathing difficulties for 30 minutes		14'32"	2450	302
29	Sept13	B1	M	17	62	F		Abnormal shadow on lung after X-ray	● (L)	21'16"	3363	452
30	Sept13	B1	M	15	67	M		Chest/circulatory problems - wheezing (inpatient)	*	11'55"	1323	163
31	Sept13	B1	M	18	56	M		Right kidney cancer (referral)	● (L)	10'12"	1435	137
32	Sept13	A3	F	19	38	F		Tumour in entrance to uterus (referral)	● (L)	8'28	1555	186
33	Sept13	B4	M	13	27	M	●(n)	Stomach pain for 2 weeks		14'41"	2646	335
34	Sept13	B4	M	19	38	F		Tumour in entrance to uterus (referral)	● (L)	6'48"	1014	127
35	Sept13	A5	M	16	50	F		Acute inflammation if the bronchial tubes	*	15'56"	3370	361
36	Sept13	A5	M	17	62	F	●(d)	Abnormal shadow on lung after X-ray	● (L)	10'41"	2017	261
37	Sept13	A5	M	18	56	M		Right kidney cancer (referral)	● (L)	9'40"	1580	169
38	Sept13	B2	M	20	34	M		High blood pressure (?Stroke)	● (L)	24'04"	2863	230
39	Sept20	A3	F	21	41	F		Polyp on liver (referral)	● (L)	17'49"	3047	358

3rd Person: ●(r) = P's relative ●(n) = Nurse ●(d) = Another doctor

Referral: (L) P brought a referral letter * Not a referral but P has visited another Doc before coming here. # P came because of the results of a routine medical check up.

Appendix 7 Overview of the data (Continued)

Rec.#	Date	D.	D. Sex	P	P. Age	P. Sex	3rd Per	Complaint	Referral	Length	Words	Turns
40	Sept20	A3	F	22	46	F		Persistent cough since end of last month (3 weeks)	●	19'00"	3068	333
41	Sept20	A7	F	24	35	M		During dry periods, front of head feels heavy & breath stops (breathless) since a year ago.	● (L)	9'22"	1499	231
42	Sept20	A7	F	27	61	M		Gall stone (referred from other department	*	8'49"	1339	201
43	Sept20	A7	F	28	50	M		Shadow on lung (referral from orthopedic department in this hospital)	● (L)	8'41"	1416	172
44	Sept20	A7	F	29	35	F		Shadow on liver (referred from Gynocology	● (L)	2'11"	436	56
45	Sept20	B4	M	30	42	F		?	● #	18'35"	2442	185
46	Sept20	B4	M	27	61	M		Gall stone (referred from other department	*	21'39"	3903	242
47	Sept20	B4	M	21	41	F		Polyp on liver (referral)	● (L)	9'49"	1343	169
48	Sept20	A1	M	30	42	F		?	● #	24'34"	2887	240
49	Sept20	A1	M	25	71	M		Referral after med test - ?Cough?	● (L)	22'55"	2588	242
50	Sept20	A1	M	26	37	M		Coughing for 3 weeks - bring up much phlegm & some wheezing		24'34"	2800	414
51	Sept20	B1	M	23	81	M	●(n)	Dizzy spells caused by anaemia - felt bad since last month. (last year - water on the lungs - spent 3 months in hospital)	*	7'35"	1327	210
52	Sept20	B1	M	24	35	M		During dry periods, front of head feels heavy & breath stops (breathless?) - since a year ago.	● (L)	8'25"	851	130
53	Sept20	B1	M	25	71	M		Referral after med test - ?Cough?	● (L)	26'02"	2917	321
54	Sept20	B1	M	24	35	M		During dry periods, front of head feels heavy & breath stops (breathless?) - since a year ago.	● (L)	8'20"	1635	237
55	Sept20	B1	M	26	37	M		Coughing for 3 weeks - bring up much phlegm & some wheezing		7'05"	885	115
56	Sept20	B1	M	22	46	F		Persistent cough since end of last month (3 weeks)	●	10'24"	1178	108
57	Sept20	B1	M	26	37	M		Coughing for 3 weeks - bring up much phlegm & some wheezing		5'24"	1161	173
58	Sept20	B1	M	22	46	F		Persistent cough since end of last month (3 weeks)	●	4'24"	627	84
59	Sept27	B1	M	31	62	F		Worried about lung cancer?	● (L)	13'22"	1632	173
60	Sept27	A2	M	31	62	F		Worried about Lung cancer?	● (L)	13'05"	1626	185
61	Sept27	A2	M	32	34	F		Liver damage/malfunctioning detected after blood test (last year) suspected pleurisy	*	9'11"	1073	112
62	Sept27	A2	M	33	46	F		Sickly feeling since 2 days ago (Inpatient in neurosurgery)	● (L)	10'48"	1043	110
63	Sept27	B4	M	34	64	M		Bloody stools since 10 days ago		10'34"	1677	241
64	Sept27	B4	M	35	30	M		Sickly feeling everyday		16'26"	2280	251
65	Sept27	B4	M	32	34	F		Liver damage/malfunctioning detected after blood test (last year) suspected pleurisy	*	10'42"	1358	192
66	Sept27	B4	M	36	30	F		Nettle rash, weariness, tiredness, slight fever at night (after cold)		8'53"	1835	208
67	Sept27	B4	M	33	46	F	●(r)	Sickly feeling since 2 days ago (Inpatient in neurosurgery)	● (L)	17'35"	2197	317
68	Sept27	A6	M	34	64	M		Bloody stools since 10 days ago		9'43"	1506	207
69	Sept27	A6	M	35	30	M		Sickly feeling everyday		8'28"	1354	184
70	Sept27	A6	M	37	77	F		Dizziness, since coming out of hospital	*	13'32"	2313	270
71	Sept27	A6	M	38	53	M		Persistant Headache - 5 days in hospital for tests (stomach, colon, liver), but no diagnosis.	● (L)	19'08"	3079	319
72	Sept27	A6	M	36	30	F		Nettle rash, weariness, tiredness, slight fever at night (after cold)		7'01"	1171	153
73	Sept27	B2	M	37	77	F	●(r)	Dizziness, since coming out of hospital	*	36'33"	5647	533
Mean					**50.9**					**17'54"**	**2474.1**	**265.8**
Std Dev					**15.3**					**6'50"**	**1014.97**	**108.7**

3rd Person: ●(r) = P's relative ●(n) = Nurse ●(d) = Another doctor

Referral: (L) P brought a referral letter * Not a referral but P has visited another Doc before coming here. # P came because of the results of a routine medical check

Appendix 8 Junior Doctors - Basic Statistics

Rec.#	*D #*	*D M/F*	*P. #*	*P. Age*	*P M/F*	*3rd?*	*Trans*	*Time*	*Secs*	*Turns*	*Words*	*D Wds (%)*	*P Wds (%)*	*3Pers Wds*	*D:P Wds1*	*D Turns*	*P Turns*	*3Pers Turns*	*D Av Turn (wds)*	*P Av Turn (wds)*	*Wd /sec*	*Wd /turn*
1	A5	M	1	74	F	Y Rl.	FY	11'48"	708	442	2024	1070 (53%)	719 (36%)	235	1.12	212	178	52	5.05	4.04	2.86	4.58
2	A5	M	2	52	F	N	MS	19'22"	1162	474	2582	1578 (61%)	1004 (39%)	0	1.57	243	231	0	6.49	4.35	2.22	5.45
3	A5	M	3	65	M	N	MS	20'02"	1202	502	3503	1145 (33%)	2358 (67%)	0	0.49	252	250	0	4.54	9.43	2.91	6.98
4	A5	M	4	20s	F	N	MS	6'50"	410	173	992	568 (57%)	424 (43%)	0	1.34	86	87	0	6.60	4.87	2.42	5.73
11	A2	M	9	32	M	N	FY	8'48"	528	160	1182	586 (50%)	596 (50%)	0	0.98	81	79	0	7.23	7.54	2.24	7.39
12	A2	M	7	56	M	N	FY	10'12"	612	191	1384	700 (51%)	684 (49%)	0	1.02	97	94	0	7.22	7.28	2.26	7.25
13	A2	M	6	56	F	Y Rl.	FY	10'03"	603	174	1168	669 (57%)	443 (38%)	56	1.34	85	81	8	7.87	5.47	1.94	6.71
14	A2	M	8	25	M	N	FY	5'40"	340	125	755	437 (58%)	318 (42%)	0	1.37	63	62	0	6.94	5.13	2.22	6.04
17	A1	M	10	75	M	N	NT	12'32"	752	186	1497	559 (37%)	938 (63%)	0	0.60	93	93	0	6.01	10.09	1.99	8.05
18	A1	M	11	38	M	N	NT	19'56"	1196	231	2817	694 (25%)	2123 (75%)	0	0.33	114	117	0	6.09	18.15	2.36	12.19
19	A1	M	5	29	M	Y Rl.	NT	11'46	706	188	1245	563 (45%)	434 (35%)	248	0.83	85	71	32	6.62	6.11	1.76	6.62
20	A1	M	12	52	M	N	NT	11'38"	698	131	1509	574 (38%)	935 (62%)	0	0.61	63	68	0	9.11	13.75	2.16	11.52
22	A4	M	13	27	M	N	CH	8'23"	503	116	756	512 (68%)	244 (32%)	0	2.10	62	54	0	8.26	4.52	1.50	6.52
24	A4	M	15	67	M	N	CH	19'09"	1149	216	1552	785 (51%)	767 (49%)	0	1.02	108	108	0	7.27	7.10	1.35	7.19
32	A3	F	19	38	F	N	FY	8'28	508	186	1332	824 (62%)	508 (38%)	0	1.62	95	91	0	8.67	5.58	2.62	7.16
35	A5	M	16	50	F	N	NT	15'56"	956	359	3158	1516 (48%)	1642 (52%)	0	0.92	179	180	0	8.47	9.12	3.30	8.80
36	A5	M	17	62	F	Y D2	FY	10'41"	641	261	1746	901 (52%)	824 (47%)	21	1.07	131	128	2	6.88	6.44	2.72	6.69
37	A5	M	18	56	M	N	NT	9'40"	580	168	1515	762 (50%)	753 (50%)	0	1.01	84	84	0	9.07	8.96	2.61	9.02
39	A3	F	21	41	F	N	NT	17'49"	1069	354	2895	1495 (52%)	1400 (48%)	0	1.07	176	178	0	8.49	7.87	2.71	8.18
40	A3	F	22	46	F	N	NT	19'00"	1140	329	2998	1293 (43%)	1705 (57%)	0	0.76	164	165	0	7.88	10.33	2.63	9.11
41	A7	F	24	35	M	N	NT	9'22"	562	230	1435	790 (55%)	645 (45%)	0	1.22	115	115	0	6.87	5.61	2.55	6.24
42	A7	F	27	61	M	N	NT	8'49"	529	199	1261	613 (49%)	648 (51%)	0	0.95	100	99	0	6.13	6.55	2.38	6.34
43	A7	F	28	50	M	N	NT	8'41"	521	172	1397	1065 (76%)	332 (24%)	0	3.21	88	84	0	12.10	3.95	2.68	8.12
44	A7	F	29	35	F	N	NT	2'11"	131	58	397	261 (66%)	136 (34%)	0	1.92	29	29	0	9.00	4.69	3.03	6.84
48	A1	M	30	42	F	N	CH	24'34"	1474	235	2513	1091 (43%)	1422 (57%)	0	0.77	117	118	0	9.32	12.05	1.70	10.69
49	A1	M	25	71	M	N	FY	22'55"	1375	242	2527	1016 (40%)	1511 (60%)	0	0.67	121	121	0	8.40	12.49	1.84	10.44
50	A1	M	26	37	M	N	FY	24'34"	1474	413	2801	1463 (52%)	1338 (48%)	0	1.09	208	205	0	7.03	6.53	1.90	6.78
60	A2	M	31	62	F	N	CH	13'05"	785	185	1464	513 (35%)	951 (65%)	0	0.54	91	94	0	5.64	10.12	1.86	7.91
61	A2	M	32	34	F	N	CH	9'11"	551	112	986	475 (48%)	511 (52%)	0	0.93	59	53	0	8.05	9.64	1.79	8.80
62	A2	M	33	46	F	N	CH	10'48"	648	108	936	459 (49%)	477 (51%)	0	0.96	57	51	0	8.05	9.35	1.44	8.67
68	A6	M	34	64	M	N	FY	9'43"	583	207	1423	606 (43%)	817 (57%)	0	0.74	104	103	0	5.83	7.93	2.44	6.87
69	A6	M	35	30	M	N	NT	8'28"	508	183	1251	594 (47%)	657 (53%)	0	0.90	93	90	0	6.39	7.30	2.46	6.84
70	A6	M	37	77	F	N	NT	13'32"	812	269	2014	585 (29%)	1429 (71%)	0	0.41	133	136	0	4.40	10.51	2.48	7.49
71	A6	M	38	53	M	N	NT	19'08"	1148	319	2688	672 (25%)	2016 (75%)	0	0.33	159	160	0	4.23	12.60	2.34	8.43
72	A6	M	36	30	F	N	FY	7'01"	421	153	1007	431 (43%)	576 (57%)	0	0.75	78	75	0	5.53	7.68	2.39	6.58
JD Ave				**49.1**					**771.0**	**230.0**	**1734.6**	**796.1 (48.3%)**	**922.4 (50.6%)**	**16.0**	**1.0**	**115.0**	**112.3**	**2.7**	**7.2**	**8.1**	**2.3**	**7.7**
AVE				**48.72**					**785.84**	**208.84**	**1605.65**	**951.4 (61.5%)**	**643.9 (37.8%)**	**10.31**	**2.51**	**107.50**	**99.64**	**1.70**	**9.48**	**6.16**	**2.09**	**7.98**

[1] Where there is a third person the ratio is D:(P+3rd Person)

Appendix 9 Senior Doctors - Basic Statistics

Rec.#	D #[1]	P. #	P. Age	P M/F	3rd?	Trans	Time	Secs	Turns	Words	D Wds (%)	P Wds (%)	3P Wds (%)	D:P Wds[2]	D Turns	P Turns	3P Turns	D Av Turn (wds)	P Av Turn (wds)	Word /sec	Word /turn
5	B5	1	74	F	N	CH	9'50"	590	129	873	783 (90%)	90 (10%)	0 (0%)	8.70	74	55	0	10.58	1.64	1.48	6.77
6	B5	5	29	M	N	CH	12'34"	754	105	731	560 (77%)	171 (23%)	0 (0%)	3.27	64	41	0	8.75	4.17	0.97	6.96
7	B5	6	56	F	N	CH	8'10"	490	64	659	523 (79%)	136 (21%)	0 (0%)	3.85	39	25	0	13.41	5.44	1.34	10.30
8	B5	7	56	M	N	CH	22'17"	1337	137	1945	1590 (82%)	355 (18%)	0 (0%)	4.48	84	53	0	18.93	6.70	1.45	14.20
9	B5	2	52	F	Y Ns.	CH	16'14"	974	131	1063	834 (78%)	178 (17%)	51 (5%)	3.64	73	51	7	11.42	3.49	1.09	8.11
10	B5	8	25	M	N	FY	7'13"	433	58	682	629 (92%)	53 (8%)	0 (0%)	11.87	33	25	0	19.06	2.12	1.58	11.76
15	B3	9	32	M	N	FY	23'40"	1420	419	3221	2176 (68%)	1045 (32%)	0 (0%)	2.08	211	208	0	10.31	5.02	2.27	7.69
16	B3	10	75	M	N	NT	7'47"	467	210	1309	939 (72%)	370 (28%)	0 (0%)	2.54	107	103	0	8.78	3.59	2.80	6.23
21	B6	11	38	M	N	MS	35'09"	2109	175	2963	2030 (69%)	933 (31%)	0 (0%)	2.18	91	84	0	22.31	11.11	1.40	16.93
25	B1	14	51	F	N	CH	11'36"	696	123	928	433 (47%)	495 (53%)	0 (0%)	0.87	62	61	0	6.98	8.11	1.33	7.54
26	B1	16	50	F	N	CH	11'03"	663	57	760	687 (90%)	73 (10%)	0 (0%)	9.41	35	22	0	19.63	3.32	1.15	13.33
27	B1	16	50	F	N	MS	5'56"	356	132	957	684 (71%)	273 (29%)	0 (0%)	2.51	67	65	0	10.21	4.20	2.69	7.25
28	B1	14	51	F	Y Ns.	MS	14'32"	872	305	1936	1421 (73%)	491 (25%)	24 (1%)	2.76	157	143	5	9.05	3.43	2.22	6.35
29	B1	17	62	F	N	MS	21'16"	1276	452	2551	2029 (80%)	522 (20%)	0 (0%)	3.89	241	211	0	8.42	2.47	2.00	5.64
30	B1	15	67	M	N	MS	11'55"	715	161	1051	700 (67%)	351 (33%)	0 (0%)	1.99	85	76	0	8.24	4.62	1.47	6.53
31	B1	18	56	M	N	FY	10'12"	612	137	1387	1200 (87%)	187 (13%)	0 (0%)	6.42	72	65	0	16.67	2.88	2.27	10.12
33	B4	13	27	M	Y Ns.	FY	14'41"	881	335	2294	1739 (76%)	497 (22%)	58 (3%)	3.13	171	158	6	10.17	3.15	2.60	6.85
34	B4	19	38	F	N	FY	6'48"	408	126	905	740 (82%)	165 (18%)	0 (0%)	4.48	66	60	0	11.21	2.75	2.22	7.18
38	B2	20	34	M	N	NT	24'04"	1444	226	2801	2566 (92%)	235 (8%)	0 (0%)	10.92	116	110	0	22.12	2.14	1.94	12.39
45	B4	30	42	F	N	CH	18'35"	1115	184	2203	1566 (71%)	637 (29%)	0 (0%)	2.46	99	85	0	15.82	7.49	1.98	11.97
46	B4	27	61	M	N	CH	21'39"	1299	240	3346	2497 (75%)	849 (25%)	0 (0%)	2.94	122	118	0	20.47	7.19	2.58	13.94
47	B4	21	41	F	N	FY	9'49"	589	169	1121	710 (63%)	411 (37%)	0 (0%)	1.73	86	83	0	8.26	4.95	1.90	6.63
51	B1	23	81	M	Y Ns.	MS	7'35"	455	300	985	302 (31%)	659 (67%)	24 (2%)	0.44	197	97	6	1.53	6.79	2.16	3.28
52	B1	24	35	M	N	MS	8'25"	505	130	705	542 (77%)	163 (23%)	0 (0%)	3.33	68	62	0	7.97	2.63	1.40	5.42
53	B1	25	71	M	N	MS	26'02"	1562	318	2459	1993 (81%)	466 (19%)	0 (0%)	4.28	167	151	0	11.93	3.09	1.57	7.73
54	B1	24	35	M	N	MS	8'20"	500	237	1324	997 (75%)	327 (25%)	0 (0%)	3.05	124	113	0	8.04	2.89	2.65	5.59
55	B1	26	37	M	N	MS	7'05"	425	115	734	479 (65%)	255 (35%)	0 (0%)	1.88	61	54	0	7.85	4.72	1.73	6.38
56	B1	22	46	F	N	FY	10'24"	624	107	1041	854 (82%)	187 (18%)	0 (0%)	4.57	58	49	0	14.72	3.82	1.67	9.73
57	B1	26	37	M	N	MS	5'24"	324	173	911	786 (86%)	125 (14%)	0 (0%)	6.29	87	86	0	9.03	1.45	2.81	5.27
58	B1	22	46	F	N	MS	4'24"	264	84	520	423 (81%)	97 (19%)	0 (0%)	4.36	43	41	0	9.84	2.37	1.97	6.19
59	B1	31	62	F	N	CH	13'22"	802	172	1470	1146 (78%)	324 (22%)	0 (0%)	3.54	91	81	0	12.59	4.00	1.83	8.55
63	B4	34	64	M	N	MS	10'34"	634	229	1335	751 (56%)	584 (44%)	0 (0%)	1.29	119	110	0	6.31	5.31	2.11	5.83
64	B4	35	30	M	N	MS	16'26"	986	249	1934	1554 (80%)	380 (20%)	0 (0%)	4.09	128	121	0	12.14	3.14	1.96	7.77
65	B4	32	34	F	N	MS	10'42"	642	191	1105	766 (69%)	339 (31%)	0 (0%)	2.26	102	89	0	7.51	3.81	1.72	5.79
66	B4	36	30	F	N	NT	8'53"	533	208	1516	887 (59%)	629 (41%)	0 (0%)	1.41	106	102	0	8.37	6.17	2.84	7.29
67	B4	33	46	F	Y Rl.	MS	17'35"	1055	308	1831	1373 (75%)	424 (23%)	34 (2%)	3.00	158	141	9	8.69	3.01	1.74	5.94
73	B2	37	77	F	Y Rl.	FY	36'33"	2193	539	5062	3444 (68%)	1377 (27%)	241 (5%)	2.13	276	214	49	12.48	6.43	2.31	9.39
SD Av			**48.38**					**800.68**	**187.65**	**1476.74**	**1107 (74.75%)**	**365.38 (25%)**	**4.6 (0.3%)**	**3.98**	**100.00**	**86.94**	**0.71**	**11.77**	**4.24**	**1.89**	**8.30**
AVE			**48.72**					**785.84**	**208.84**	**1605.65**	**951 (61.52%)**	**644 (37.79%)**	**10.3 (.7%)**	**2.51**	**107.50**	**99.64**	**1.70**	**9.48**	**6.16**	**2.09**	**7.98**

[1] All Senior Doctors are middle-aged males

[2] Where there is a third person the ratio is D:(P+3rd Person)

Appendix 10 Dialogue #4

Dialogue #4（日） cough/flu

Doctor (A5): Sex = M Age = 20s
Patient (4): Sex F Age = 20/21
Date: 10/09/01
Transcriber: Maiko Sato
Length: 7' 50"
Words 1959
Turns 153
[] 24
Pauses 35
() 13
? 46

P (female student) seems irritated about the doctor asking too many questions. After the patient answers a question, D asks about the same thing again. Maybe D is trying to relax the patient and keeps saying something so as to avoid any long silences. This does not seem to be what P wants, though – she's got a rotten cough, and just wants to get treatment as soon as possible. ***trouble*** *(from P)*

	D: chotto ohanashi kiite moraimasu no ne (.5)	*D: first I'd just like to hear your story OK (.5).*
	P: (*cough cough*)	*P: (cough cough)*
	D: hajimemashite	*D: how do you do,*
	(1)	*(1)*
	D: watashi dai ichinaika no (*name*) to moushimasu	*D: I'm (name) of the first department of internal medicine*
	(2.5)	*(2.5)*
	D: etto desu ne (.5) ichiou shinkeika no sensei kara o tegami itadaite desu ne	*D: erm, right, well (.5) from the doctor in the neurology department, I received a letter.*
	P: ha:i	*P: yes*
	D: seki ga hidoi (.5)	*D: the cough is bad.*
	P: ha:i	*P: yes*
	D: ato	*D: and*
	(2)	*(2)*
	D: o netsu ga [deru desu ne]	*D: you've got a fever, [haven't you]*
	P: (*cough*) hai	*P: (cough) yes*
	D: hai (.6)	*D: right (.6)*
	P: [a hai (*cough*] *cough cough*)	*P: [ah, yes. (cough] cough cough)*
	D: itsu kara desu ka (*down tone*)	*D: since when did it start?*
	(2) (*slight rustling of paper*)	*(2) (slight rustling of paper)*
	P: e: to:	*P: ermm well*
	(2)	*(2)*
	P: ni shuu (.5) kan ka san san shuukan mae (.4) kara [ano]	*P: two wee (.5) ks or since three three weeks (.4) ago [erm]*
	D: [hai]	*D: [yes]*
	P: hentousen ga haretekite:	*P: (my) tonsils have swollen up*
0: 39	(2 – *sound of writing*)	*(2 - sound of writing)*
	D: hentousen ga hareteki [ta?]	*D: tonsils have swollen [up?]*
	P: [un] de nodo ga sugoi itaku te un	*P: [mm] and, (my) throat, is really painful.*
	D: ee (.5)	*D: yes. (.5)*
	P: demo ano nodo nuru supuree toka mo [shitetara]	*P: but, (I've) [used] that throat spray too*
	D: [ee]	*D: [yes]*
0: 51	P: ano hentousen no hare ga hiita kara sono mama shitetara	*P: uhm, because it is causing (my) tonsils to swell, if it is like that*
	D: ee	*D: yes.*
0: 57	P: kondo u:n (.7) kounetsu	*P: next time, ermm, (.7) a high fever*
	(1)	*(1)*
	P: ga [dete]	*P: [resulted]*
	D: [ee]	*D:[yes]*
	P: de: un	*P: and, ermm*
	D: netsu dore kurai deshita	*D: the fever, how high was it?*
	P: ichiban takai toki de san kyuu do nana fun un	*P: at its highest point, thirty-nine degrees seven minutes, mm.*
	(1.5)	*(1.5)*
	D: san kyuu do kurai ?	*D: About thirty-nine degrees?*
	P: ha:i	*P: yes*
	D: kore ga deta no itsu koro	*D: this happened around when?*
1: 12	P: kore ha unto	*P: that's, erm well,*
	(1.5)	*(1.5)*
	P: kyou un kyou	*P: today, huh? today?*
	D: (.4) kyou ga ne kyuu gatsu no ju nichi	*D: today is erm September [tenth]*
	P: ju nichi u?	*P: [tenth] mm?*
	(2)	*(2)*
	P: ja isshuukan ma:e	*P: well, one week ago-o*
	D: isshuukan mae jaa kyuu gatsu no ni nichi toka mikka toka	*D: one week ago, well, September second or third.*
	P: ha:i	*P: yes*
	D: sore gurai (.5) seki ha ima dou desu ka	*D: about that. (.5) How is the cough now?*
	P: seki desu ka a tomaranai gurai	*P: the cough ri-ight it's like it won't stop.*
	D: seki ha tomaranai ima ha dou desu? seki ha osamattekite iru wari to	*D: the cough doesn't stop. how is it now? the cough has calmed down, rather?*
	P: osamattekite na:i desu	*P: it ha-sn't calmed down,*
	D: ima mitai na kanji	*D: now you're feeling?*
1: 41	(2)	*(2)*
	P: nanka ikkai seki suru to zutto shiteru	*P: something, I cough once and, it goes on all the time.*
	D: u:n ne netsu ha ima dore gurai desu ka	*D: mmm. yes, your fever is how high now?*
	P: unto o (.5) nana do roku (.7) [bun]	*P: mm we-ell (.5) seven degrees six (.7) [minutes].*
1: 58	D: [nana do roku bun]	*D: [seven degrees six minutes]?*
	(7 - *sound of writing, loud snap, sound of writing*)	*(7 - sound of writing, loud snap, sound of writing)*
	D: tan toka ha demasu	*D: is there phlegm or anything coming out?*
	P: shouryou desu ne:	*P: a small amount, you kno-ow.*
	D: shouryou deru toki ha donna iro toka ne: [e eto]	*D: a small amount. when it comes out, what color and so on, [ermm well]*
	P: [fu:n]	*P: [humph]*
	D: nebaneba desu ka soretomo ma ne kou katamari mitai ni to shiteru no ka soretomo wari to sara saratto shi te iru no ka	*D: is it sticky? or well, you know, like a kind of lumpy, or is it rather smooth?*
2: 16	P: aa un n go dorodoro desu [ne]	*P: yeah, erm-mm, (.5) thi-ick [that's right].*
	D: [aa]	*D: [ah]*
	(2)	*(2)*
	D: shoku ha?	*D: the color?*
	P: shoku ha (.4) kiiro ni haiiro ga kakatta you na	*P: the color is (.4) yellow like with grey splashed in it*
2: 27	(7 – *sound of writing*)	*(7 – sound of writing)*
	D: fudan ha (.4) yappari momo toka yoku haremasu	*D: usually (.4) also are your tonsils etc. swollen up a lot?*
	P: iya harenai desu	*P: No, they haven't swollen up.*
	D: harenai	*D: [not swollen up]*
	P: hajimete kono gurai no netsu ga dete	*P: [it's the first time] I've had this high a fever*
	D: hajimete desu ka	*D: the first time?*
	P: ha:i	*P: yes*
	(2)	*(2)*
	D: jibika toka ne souiu tokoro wo jushin toka shita koto ga arimasu ka	*D: the ear nose department, that kind of place, have you ever consulted that kind of doctor?*
	P: jibi (.) ka (.) chiisai [toki ni]	*P: ear nose (.) department (.) [when I was] a child*
	D: [un un]	*D: [mm mm]*
	P: ichiou ikkai ano chuujien de shujutsu shiteru n desu [kedo]	*P: about once for tympanitis I had an operation [actually]*
	D: [ee] sore igai ni saikin ha kakattenai	*D: [yes] apart from that recently you have[n't] suffered*

Appendix 10 Dialogue #4

		from anything
	P: nai desu ha:i	*P: [nothing], yes.*
	D: a sou desu ka	*D: ah, right I see.*
	P: ha:i	*P: yes*
2:	D: maa naika demo ii desu kedo ma hentou	*D: well, even an internal medicine department (.5) well,*
54	ga ookii ne toka sou iu koto iwareta koto	*your tonsils are big right, and that's what you're saying*
2:	P: un?	*P: eh?*
58		
	D: hentou hentousen ga ne maa kuchi no naka kara mi te ookii ne: toka	*D: tonsils, your tonsils are you know, well looking from inside your mouth they're big, ri-ight, and so on.*
	P: a. nai desu	*P: ermm, they aren't.*
	D: sou iu koto iwarenakatta desu ka	*D: wasn't that what you said?*
	P: ha:i	*P: yes*
3:	(4)	*(4)*
05		
	D: sousuruto yappari ima ichiban komatte iru no ha ma netsu ga sagaranai to iu koto desu ne	*D: if that's the case then now your main problem is, well, they told you your fever won't go down right?*
3:	(*sound of line being drawn heavily on*	*(sound of line being drawn heavily on paper)*
14	*paper*)	
	D: ma binetsu ga tsudui te iru to iu koto to seki ga tomaranai	*D: well your slight fever is continuing, and your coughing won't stop?*
	P: netsu ga detetemo darusa toka tte nakute tada netsu kan dake: na no	*P: even with the fever, there's no languor or anything, (it's) simply a feeling of fever onl-yy, actually.*
	D: un	*D: mm.*
	(1.8)	*(1.8)*
	P: de ato seki ga deru no ga asagata (.5) ga tokuni tsuyokute (*sniff*)	*P: and afterwards the cough comes out but, in the morning (.5) it's especially strong (sniff)*
	(4 - *sound of writing*)	*(4 - sound of writing)*
	D: asagata ga tokuni ?	*D: morning especially?*
	P: hai (.) (*sniff*)	*P: Yes, (.) (sniff)*
	(7 - *sound of writing*)	*(7 - sound of writing)*
	D: mae ni ookina byouki toka ne sareta koto arimasu?	*D: before now, have you ever suffered from a serious illness?*
	(1)	*(1)*
	P: (*sniff*) nai (*very softly*)	*P: (sniff) no (very softly)*
3:	D: ma (*loud & sudden*) ima chuujien ga	*D: Well (loud & sudden) now they said there was an*
47	arutte ne:	*inflammation of the middle ear ri-ight.*
	P: ha:i	*P: yes*
	D: ma chuujien	*D: so, tympanitis.*
	P: ha:i	*P: yes*
	D: kore jibika de	*D: in this ear nose department.*
	P: ha:i	*P: yes*
	D: shujutsu toka ha shimashita	*D: did you have an operation?*
	P: shujutsu (.5) u. a. komaku no naka ni umi ga tamatte shujutsu shite (.)masu	*P: operation (.5) uhh, aah, pus had collected in the inside of the eardrum, (they) did an operation.*
	(3)	*(3)*
	D: kore ha itsu goro desu	*D: About when was this?*
4:	P: ha: (.) e: to	*P: haa … ermm well*
03		
	(1.5)	*(1.5)*
	P: youchien toka sonna	*P: at kindergarten that*
4:	D: [a sou desu ka]	*D: [ah, is that right]*
07		
	P: [chissai gurai desu] ha:i	*P: [when I was young] yes*
	D: a. sou desu ka kanari [mukashi desu ka]	*D: ah, is that so? rather [a long time ago was it?]*
	P: ha:i	*P: [ye-es]*
	(1)	*(1)*
	P: ato ha ma: (.) sugoi kenkou ji desu ne [un]	*P: after that well (.) I was a very healthy baby [mm]*
	D: [ato] fudan kaze toka ha yoku [hiitari toka?]	*D: [so], usually, as for colds, do you often [get them?]*
	P: [a. hotondo] hikanai desu	*P: [ah, I practically] never get them.*
	D: a. sou desu ka	*D: ah, is that so?*
	P: u:n	*P: mmm.*
	D: sore gurai hontou ni	*D: about that much? really?*
	P: u:n	*P: mmm.*
	(1.3)	*(1.3)*
	D: o sake toka ne tabako toka ha dou desu ka?	*D: how about liquor and you know, cigarettes and so on?*
	P: a. nai desu	*P: ah, nothing.*
	D: ryouhou tomo	*D: neither of them?*
	P: hai	*P: that's right.*
	(4 - *sound of writing*)	*(4 - sound of writing)*
	D: hai o uchi de petto toka ha kattemasu?	*D: Do you keep any pets in the house?*
	P: inu ga imasu	*P: [I have] a dog*
	D: inu ga iru	*D: [you have a dog]*
	(5 - *sound of writing*)	*(5 - sound of writing)*
	fudan desu ne: arerugii toka sou iu koto ha	*D: usually you know, do you have any allergies or*
	P: aa	*P: ahh*
	D: arimasu ka?	*D: any such thing?*
	P: a unto shougakkou no koro kara no un to kusa arerugii tte ichiou iwareteta koto ga aru natsu ni naru to te ga kaburete	*P: ah, ermm, elementary school, from that time, erm well, I've been told it's a grass allergy, When summer comes, my hand gets a rash.*
	D: aaa	*D: aaahhh*
	P: te ga kabure toka	*P: my hand gets a rash.*
4:	D: hifuen hifuen mitai [na no]	*D: dermatitis, it seems like dermatitis [is that right]?*
52		
	P: [ha ai] (.5) ato keshou no: (.5) hin toka demo (.3) awanai no ha yo (.5) un odeko nanka ni shisshin ga deru	*P: [ye-es]. (.5) and even with cosme (.5) tics and stuff (.3) that don't suit me OK, (.5) erm, eczema appears on my forehead.*
	(1 - *sound of writing*)	*(1 - sound of writing)*
	D: aa keshouhin toka ma kusa toka?	*D: aah, cosmetics and, erm, grass and so on?*
	P: ha:i	*P: ye-es*
	(3.5 – *unclear – P says sth softly under her breath*)	*(3.5 – unclear – P says sth softly under her breath)*
	P: ato etto kono mae hokudai ni nyuuin shita toki mo	*P: and uh, before when I was hospitalized in Hokudai*
	D: ee	*D: yeah*
	P: kouseizai de (.4)	*P: with antibiotics (.4)*
5:	D: a. kouseizai de deta koto ga [aru?]	*D: ah, it's come on with antibiotics, [has it?]*
13		
	P: [ha:i]	*P: [ye-es]*
5:	(2.5 – *sound of writing*)	*(2.5 – sound of writing)*
17		
	D: kou iu keitou no kusuri dame desu yo tte sensei ni oshiete moraimashita	*D: that kind of medicine is no good, they say, did the doctor tell you what it was?*
	P: ha. hai [oshiete]	*P: ye-es, yes. [s/he told me]*
	D: [nani kei] toka tte iware[mashita]	*D: [what kind] did s/he [say?]*
	P: [nani kei]	*P: [what kind]*
	(2)	*(2)*
	P: u:n a. techou ni kaite arimasu	*P: mmm,oh, I wrote it in my diary.*
	D: ima ha mottenai?	*D: you don't have it now, do you?*
	P: mottenai desu ne hai	*P: no, I don't have it, yeah.*
	D: kouseizai desu ne	*D: it's an antibiotic, isn't it.*
	P: ha:i	*P: yes*
5:	D: (.5) u:n kyou hyotto shitara kouseizai	*D: (.5) mmm if say you were prescribed some antibiotics*
32	no kusuri detara tsukaenai kamo shiremasen ne	*today, you probably wouldn't be able to take them you know.*
5:	(1)	*(1)*
37		
	P: a. oo kei desu (*very softly*) (2) (*sniff*)	*P: oh, OK (very softly) (2) (sniff)*
	D: nanka kaze tte iu ka sou iu no ga	*D: well, a cold you say, that kind of thing*
	(1)	*(1)*
	D: arimasu kara ne ichiou tan mo deteru shi	*D: one gets those doesn't one, and phlegm even comes out as well.*
5:	P: ano nyuuin shita [toki no]	*P: ermm, [when] I went into hospital*
46		

Appendix 10 Dialogue #4

.5		
	D: [ee]	*D: yeah*
	P: ano kiroku toka de ha wakaranai desu ka?	*P: ermm, can't it be seen from the/my records?*
5: 52	D: chotto ne (*loud & sudden*) >kocchi ni ha ne mada kitenai n desu yo ne sono nyuuin no kiroku ga dakara chotto shirabenai to wakannai kara<	*D: well (loud & sudden) >here, erm I haven't got them yet, actually, until I've checked those hospital records I won't be able to find out<*
5: 58	P: (.8) fu:n (*very softly, downward tone*)	*P: (.8) hmm (very softly, downward tone)*
	(1)	*(1)*
	D: ato zensoku toka desu ne atopii toka sou iu koto ha arimasu?	*D: and asthma you know and atopy and so on do you have anything like that?*
	P: na:i otouto ga zensoku datta dake de watashi ha nai	*P: no. my younger brother has asthma but, I don't*
	D: go jibun ha nai	*D: you don't have it yourself?*
	P: nai	*P: I don't*
	(3)	*(3)*
	D: ato go kazoku de otouto san ga irasshatte ato go kyoudai imasu	*D: and, in your family you have a younger brother, and do you have any other brothers or sisters?*
	P: un ane ga hitori [imasu]	*P: yeah. I have one older sister*
	P: [o ne:san] to go honnin to otouto san ga hitori	*D: [an older sister], yourself and one younger brother*
	P: ha:i	*P: yes*
	D: otouto san ne zensoku ga aru?	*D: your younger brother, does he have asthma?*
	P: atta desu ne	*P: he had yes*
	D: atta (*strong rising tone*) un (*soft down tone*)	*D: he had (strong rising tone) yeah (soft down tone).*
	P: hai	*P: yes*
	(3)	*(3)*
	D: ato go kyoudai okkina byouki saretari toka ha arimasu ka	*D: and have your brother and sister ever suffered from and major diseases?*
	(1.5)	*(1.5)*
	P: un nai desu	*P: mmm, no.*
	D: nai	*D: no*
	P: hai	*P: right*
	D: otousan to okaasan ha dou desu	*D: how about your father and mother?*
	P: un: kenkou desu.	*P: mmm they're healthy.*
	D: [kenkou:]	*D: [healthy-]*
	P: [ha:i]	*P: [ye-es]*
	(2 - *sound of writing*)	*(2 - sound of writing)*
	D: wakarimashita (*strong, punctuating stress*)	*D: I see (strong, punctuating stress)*
	(6 - *sound of writing, rustling of paper*)	*(6 - sound of writing, rustling of paper)*
	D: u:n soreja kekkou desu yo	*D: mmm, OK, that's fine*
	P: hai	*P: OK.*
	D: ano mata oyobi shimasu no de ne	*D: ermm, we'll call again you later alright?*
	P: ha:i	*P: OK*
	D: hai (*rustling of paper*)	*D: OK (rustling of paper)*

Appendix 11 Dialogue 29

Doctor	B1:	m 40s
Patient	17:	f 62
Date	13/9/2001	
Transcriber:	MS	
Length:	21'16"	

Presenting condition: Abnormal shadow on lung after X-ray

********* 00:02.400 Confirming the state of things so far *********

D: e: to (.) sakihodo yoshin (.) ano (.) owatta ato desu ne (.)
P: hai.
D: mune ni kage ga arimasu node (.)
P: hai.
D: ano: sugu chotto shii chii no hou (.) ano itte moraimashita kara (.) [de]
P: [hai]
D: nochihodo (.) kono shii chii no setsumei itashimasu.
P: hai.
(1.9) ((some banging and knocking))

**** 00:16.800 Doctor Checks information about P's condition (Q&A) ****

(Many leading questions)

D: de (.) anata jishin wa anotoki chottou okagaimashita kedo (0.4) e:: to (.) ima genzai mattaku shou jou nain desu ne?
P: hai.
D: (.) hachigatsu juuichinichi kara juuhachinichi ni kakete intoutsuu (0.7)
P: hai.
D: kono toki (.) tan wa dou deshita ka?
P: (1.0) °tan wa° (.) mah (.) tokubetsu deta kioku nain desu kedo.
D: [mm]
P: [nanka] ano (1.0) kono rentogen hou tsushita ato [kara]
D: [e:.]
P: (.)kini naru no ka
D: e: .
P: asagata chotto nanka nodo wa hen dana: fun te yaru koto arun desu ke hh do hh ((laugh)) sonna ni tan wa denai desu
(1.0)
D: tan ga sukoshi (.) chotto [karamu youna kanji desu ne))]
P: [e: (.) nantonaku karamu youna kanji] ga suru.
D: ah (.) sou desu ka
(11.5) ((faint sounds of writing))
D: un (.) genzai nigatsu (.) tounyoubyou to iu koto desu kedomo (.)
P: hai.
D: shokuji ryou hou sarete irun desu [ne]
P: [hai]
D: (0.5) ·hhh mah a kekkou (0.4) ii: (.) seiseki ii desu ne.
P: ha ha ha ((laugh))
D: ano: ( ) daitai roku paasento zengo de [suii shite iru]
P: [hai sou desu]
D: ah sou desu ka? sore wa hijou ni kontorooru ii de [su ne]
P: [sou desu] ka?
(2.9) ((sound of writing))
D: kore wa heisei ichinen no toki kara desu ne?
P: hai.
D: ichiji warukatta koto wa nai desu ka?
P: (0.6) ie sono:: toki ni shindan sareta toki ni (.)
D: e:.
P: chotto karada yasemashite (.)
D: e: .
P: ano: watashi anmari omizu itadakanai hou nan desu kedo (.)
D: uun.
P: sugoi nodo ga kawaitan desu yo ne. =
D: = un.
P: soide omae okashii n ja nai no tte [itte]
D: [un]
P: kensa uketara ah tounyou sono toki wa kekkou agatteta mon desu kara (.)
D: ah sou de [su ka]
P: [e:] demo ikkagetsu kurai de kekkou kontorooru shite (.) hyaku:: (.) chotto gurai shi. shita
D: un. =
P: = n so desu ne (0.5) sore kara sore hodo agaranainde (.) °motteirun desu [kedo]°
D: [un]
(4.8) ((sounds of writing))
D: kore wa shokuji ryou hou de (.) sutto yoku natte tte (0.4) [koto desu ne?]
P: [e:] ano (.) ichiji hantoshi kurai deshou ka
D: e: .
P: okusuri wa itaedaite nondan desu kedo:
D: un.
P: mou nomu koto nai desu yo tte [iwarete.]
D: [fuuhm] sou desu ne
P: e:
(2.1) ((faint sounds of writing))
D: ano: nomigusuri desu ne.
P: sou desu
(2.3) ((chair scrapes forward in the middle of this pause))
D: tounyoubyou techou toka omochi desu ka?
P: ie nain desu
D: ah sou desu ka
(14) ((sounds of writing))
D: e. to wakarimashita =
P: = hai.
D: (0.5) un: (0.7)

********** 02:31.700 Physical examination **********

D: ja chotto shinsatsu itashimasu.
P: hai.
D: kochira desu ne
P: hai.
D: jouhanshin (.) onugini natte a douzo (.) megane wa koko ni douzoo hai.
P: ((laugh))
(2.0) ((knocking and banging))
D: onugini natte (.) taoru oo aotte mou ichido koko ni osuwari kudasai.
P: ·hhh
(33.0) ((rustling, keyboard taps a few knocks))
D: hai (.) de (.) koko ni osuwari kudasai. massugu mae o muite [kudasaai]
P: [hai]
(1.8)
D: °karuku me o aktete mit e:°
(17.5) ((in the latter part of this pause - snapping sounds, shuffling, banging – sounds like a physical examination))
D: aa:: to koe dasu
P: (.) aa:::
D: hai.
(1.6)
D: soshitara ue ni agete °mite kudasai° hai (.) chotto
(3.0) ((some sharp bangs and crashes))
D: ja (.) mazu shinzou no to o kikimasu.
P: hai.
(10.0)
D: (ja kin) mune no to o kikimasu.
P: hai. =
D: = KARUKU kuchi o akete (.) iki o suttari haitari (desu)
(13)
D: hai (.) ushiro muite kudasaai)) hai mou ikkai karuku kuchi o akete (.) iki o sutte:.
(15)
D: HAI (.) ushiro wo mite kudasa:i.
(3.6)
D: ( ) desu ne.
(15)
D: hai. ( ) te
(7.0)
D: senaka toka (.) itaku nai desu ka?
P: hai.
(2.4)
D: hai. (0.6) kochira aomuke [ni nete ku]
P: [hai.]
D: dasai.
(18) ((snaps, bangs, taps, writing))
D: migi kata no (.) ano (.)
P: hai.
D: kizu ato (.) kore shujutsu no ato nan desu NE? =
P: = sou desu: =
D: = hai.
(8.0) ((snaps, bangs etc.))
D: ja (.) senaka o (.)
P: hai.
D: senaka wo (mimasukou yurumete moraemasu ka?)
(7)
D: hai (.) (ii desu n e: iza o tatete) kudasai (.) konna kanji ni
(9.2)
D: kou osaretemo (.) toku ni itaku wa nai desu [ka?]
P: [e:]
D: (.) hai
(10)
D: a (.) chotto gomennasai (.) chotto itai desu ne?
P: hai
(42) ((occasional rustling))
D: fudan (.) ketsuatsu wa dore kurai desu ka?
(1.2) ((loud snapping))
P: hyaku yonjuu zengo no shita ga (0.4) kyuujuu (.) kurai desu
D: a (.) kyuujuu desu ka.kyou wa dakedo (.) ue yonjuu ni de shita hachijuu ni de [su yo?]

Appendix 11 Dialogue 29

P: [ah sou] [desu ka]
D: [e:] hai (.) ii desu yo))douzo osuwari kudasai))hai (.) ja (.)
P: hai
D: fuku kite kudasai.
(53) ((sound of writing, snapping))
********** 08:06.400 Explaining the X-ray **********
D: hai (.) suwatte
(3.2)
D: ttoo (.) mah (.) ano: kyou wa chotto kochira de tanjun shashin shika toranakattan desu kedomo ne (.)
P: hai.
D: ichido (.) chotto gosetsumei itashimasu to (.) kobayashisensei no took de totta (.)
P: hai.
D: shashin desu ne (.)
P: hai.
D: kihonteki ni wa yokka mo youka mo onaji desu node (.)
P: hai.
D: ano: muneno shashin to iu no wa (1.5) kuuki ga ippai aru to ekkusu sen ga ooku toorunode (.) kou iu fuu ni kuroku [tooru]
P: [hai]
D: tte iu no ga ano: kihon ge soku desu .
P: hai.
D: sore igai no mono no aru to (.) ekkususen kyuusyuu suru node (.) shiroku [natte]
P: [hah]
D: miete kuru.
P: hai hai.
D: soide (1.0) hai wa migi to hidari [atte]
P: [hai]
D: koko wa ano: (.) shinzou desu ne.
P: hai.
D: kinniku no katamari desu kara (.)
P: hai.
D: shorokunatte (.) koko wa ironna (.) ano fukubu no [zou ki ga]
P: [hai]
D: arimasu kara (.) shiroku utsutte iru.
P: hai.
D: kou iu took wa nanka ano: chou kan no gasu dattari shite (.) shiroku utsutte (.) betsuni ijou ja arimasen))
P: ah (.) sou desu ka.
D: ue (.) sakotsu de (.)
P: hai.
D: rokktsu ga kou utsutte iru.
P: hai.
D: tada (.) hai wa kuuki igai no kekkan mo (.)
P: e: .
D: futoi kekkan tok amo ippai nagarete imasu kara (.)
P: ah.
D: kore (.) edawakare sjiteiru no ga (.)
P: hai.
D: hai o nagareru kekkan nan desu ne.
P: hai.
D: kore marui (.) kore wa chou do kocchigawa ni mukatte iru kekkan o (.)
P: e: .
D: danmen zu de [mitande (.)]
P: [ah (.) hai]
D: marui (.) betsuni koremo ijou ja nai.
P: hai.
D: tada (.) daitai onaji basho no migi too idari (.) kor e: ikaku shite moraeba wakaru to omoun desu ke [domo]
P: [hai]
D: kore chotto (.) ano kenkoukotsu ga (.)
P: e: .
D: utsuttete (.)
P: a (.) hai.
******* 09:24.400 Some bad news (possibility of pneumonia) *******
D: kore wa iin desu kedomo (.)
P: hai
D: sono chottou uchigawa no kono bubun [desu ne]
P: [hai hai]
D: shiroi desu ne.
P: e: .
D: hidarigawa no hou .
P: e: (.) e: .
D: de (.) koko wa kuuki igai no nanika ga (.) ano: (1.7) kuuki to kawatte iru to iu utagai ga aru [node]
P: [hai]
D: kondo no toki (.) shii chii o kuwashiku mite mitai no desu . =
P: = hai. =
D: = kore dato (.) ano: katachi ga chotto ibitsu na [node]
P: [e:]
D: hai no naka no kage nano ka (.)
P: hai.
D: kyou maku (.) hai o torimaku (.) tabun maku no hou no kage nanoka (.)
P: hai.
D: chottoo hakkiri shinakatta [mono de]
P: [hai]
D: de (.) sokumen de hakkiri amari yoku hakkiri utsutte (konakiatta) node (.)
P: hai
D: shii chii torimashite desu ne.
P: ((cough)) hai.
D: mah (.) kocchi no hou ga issenchi gurai no haba de (.) kou [zuu: tto]
P: [ah (.) hai]
(1.4)
D: toru (.) ruuchin no (0.6) futsuu no (0.4) ano shashin nan desu kedomo (.)
P: hai.
D: mah (.) hai no naka ni desu ne (.6)
P: hai.
D: shiroi bubun kokono (.) kore mo onaji you de kuuki igai no mono ate (.) [shiroku utsutte iru.]
P: [ah (.) hai.]
D: ne (1.0) ni (1.0) kekkou chotto ni nisen. sansenchi kurai [desu ka]
P: [haah]
D: n no youna mono (.) yappari hai (ya) no naka ni: (0.9) kuuki (.) ga arubeki tokoro ni: (.) nanika (.) ano tokoro no wa (0.9) °aru to.°
D: sore wa (1.0)) haien de areba (0.5) hakkekkyuu nado ooku fukunda mizu desu shi (.)
P: e: .
D: aruiwa ano: dekimono mitaina mono demo (.) ano kore wa desu ne (.) de (.) kore wa (.) ano hikakuteki
(1.8)
D: chuushin bu no shinzou no hou ni shouten atta on. ano (.) (ke) nan desu kedomo (.)
P: hai.
D: (.) un (1.3) onaji basho wa koko to koko desu ne (0.8) sou su to (.) shiroi bubun
(1.4)
P: hai.
D: chotto kou sukunai n de. (.)
P: hai.
D: hikakuteki anoo (0.9) mada kono shashin dewa masshiro ni mietemasu kedomo (.)
P: hai.
D: hikakuteki (.) kuuki ga mada (.) ano: (1.8) tamotarete iru bubun mo kekkon arun ja nai [katte]
P: [haai]
D: koto desu ne
(4.05)
D: de hitotsu (1.0) anata tounyoubyou: wa (.) kontorooru wa hijou ni (.) iin desu kedomo =
P: = hai. =
D: = < em vi roku ten juu de (.) juu pahsento de eijou ni iin desu kedomo > (.)
P: h [ai.]
D: [hai.] tounyoubyou no hito to iu no wa baikin ni taishite hijou ni ano (.) teikousei ga (.)
P: hai.
D: yowain [desu ne]
P: [hai]
D: dakara (.) kikanshien mitaina mono koshi [te mo]
P: [e:]
D: sore ga sugu (.) haien ni ikou shi yasuishi (.) haien ni naru to kondo (.) nouyou tte itte (.) ano: hi (.) hifu kega shite (.)
P: un.
D: nanka doro (.) kitanai mono (.) dorotto kattara (.) hika ni nanka (.) dorotto shita midori irono ekitai no mono ga tamaru koto arimasu yo ne (.) anou (.) umi to iu [mono ga tamaru koto arimasu yo ne?]
P: [a (.) hai (.) a (.) e: (.) hai hai]
D: dakara: (.) haien no baai mo naorikata ni yotte wa desu ne (.) sou iu umi no youna mono wa (.) hai no naka de tamatte kuru baai mo arun de [su yo.]
P: [° ah °]
******** 12:02.688 Explaining importance of CT scan results ********
D: dakara (.) kono shii chii wo mimasu to desu ne (.) hitotsu wa (.)
P: hai.
D: anata wa sono tounyoubyou ga aru iu (.) ano (.) koto mo awasete kangaeru to (.)
P: e (.) un.
D: e: (.) hai nouyou to iu (.)
P: ah
D: mono ni natteiru kanousei ga hitotsu [aru darou to]
P: [sou desu ka]

Appendix 11 Dialogue 29

D: sore to yahari ano: dekimono mitaina mono desu ne (.) hai gan mo fukumete desu kedomo e: (.) sou itta mono no (.) ano (.) hitei dekinai darou °to iu fuu ni omoimasu°
(1.3)
D: sore de (1.1) kongo no houshin desu keredomo
P: °hai°
(6.3)
P: kekkaku toka ja nain desu [ka]
D: [e.] (.) sono kanou sei mo touzen ari [masu ne]
P: [°sou desu kah°]
D: e (0.5) kekkaku no kanou sei mo (.) ano: hitei dekinai to °omoimasu° (.) e: (0.9) tada koko dake nichi jou ni genkyoku shite masukedomo [ne]
P: [ah]
(1.3)
********** 12:50.000 Appointment discussion **********
D: sore de (0.4) ano:::: (2.0) moshi mo yoroshikereba desu ne: =
P: = hai.
(2.0)
D: >ashita mo mata koremasu ka?<
P: <ashita (.) nannyou bi deshitakke?>
D: >kinnyou [bi desu ne]<
P: [kinnyou bi ne] (.) e::: ashita: (.) wa: daijoubu to omoimasu.
(8.0) ((lots of slow tapping at a computer keyboard))
********** stomach camera discussion **********
D: °ne° (1.6) i kamera tte uketa koto: (.) [o ari desu ka?]
P: [i kamera wa] [arimasu]
D: [ah sou desu ka]
P: mai toshi(.)
D: a (.)
P: i kamera wa yatte.
D: <dou desu ka? (.) taihen desu ka? (0.9) ( ) desu ka?>
P: ha ha ha: ((laugh))
D: u:n =
P: = m::: a. (.) kamera [ne]
D: [un]
P: kamera wa(.) sankai °nonda kana:° e:
D: ano::: (.) i kamera wa desu ne (.)
P: e: .
D: shokuru shokuryo ano shokumotsu ga tooru hou no kuda ni (.)
P: hai.
D: ano:: kamera o irete itte
P: e. =
D: = i no naka o miterun desu kedo (.)
P: e.
D: sore to onaji you ni ano sono ↑kuuki no toori michi no hou ni (.)
P: e .
D: hoso:i ano: kamera o irete itte (.) hai no naka o miru kensa tte no ga arun [desu ne]
P: [ah (.) hai]
D: n de: (0.6) ma ku:ki no hou wa fudan kokeibutsu toorimasen no de (.)
P: e:
D: ano::: futsuu no joutai de sou iu kokeibutsu iretara seki ga dete
P: e: .
D: taihen nan desu yo.
P: hai.
D: i kamera no toki wa kantanna dorotto shita masui o kuchi ni suru dake: datta (.)
P: [hai]
D: [ano] nodo no (ku) ni suru dake data to omoun desu kedo (.)
P: hai.
D: kono kikanshi kou yaru toki wa desu ne (.)
P: e: .
D: yahari seki toka no (.) kokorahen no kankakuo mou kanzen ni (0.4) ano (.) ikkai masui shinai to desu ne (.)
P: e .
D: dame na no de (0.4)
P: hai.
D: ano:::::< i kamera ni kuraberu to (0.5) e:: sou itta zenshochi n chotto jikan kakarun desu kedomo (0.9)
D: sou yuu zenshochi suru to (.) seki toka nakunarimasu no [de]
P: [hai.]
D: (.) ano kensa chuu wa (.) i kamera ni nano ge:ge: (suru) youna [(koto ga:)]
P: [ah (.) sou de(.)]
D: gozaimasen.
P: ((faint laugh)) hai.
D: e. (0.7) de sou iu kensa o shite desu ne (.)
P: e.
D: choudo kono (.) kikanshikyou (0.4) de miru to (.) chikai shi (nado) no sugu chikaku ni (.)
P: ah.
D: kono kage ga arimasu node (.)
P: hai.
D: koko ni desu ne (.)
P: e.
D: kikanshikyou tsukatte kono chokaku made (.) ano::: joutai o mite
P: hai.
D: (.) soide kono bubun o kou: sukoshi arattari toka desu ne (.)
P: e.
D: saibou o tottari toka shite (.)
P: e.
D: sono baikin no kensa (.)
P: e.
D: arui wa ano kao (fukuin) warui (.) saibou [ga nai ka]
P: [laugh]
D: douka (0.4) sou itta kensa o desu n [e:]
P: [e.]
D: (0.5) uu: °<ashita chotto yatte mitai [na? to]>°
P: [ah hai.]
D: (iu fuu) ni omoun desu ne.
P: nanji nan deshou?
D: gogo kara nan desu .
P: gogo kara (.) hai.
D: gogo kara desu ne. e
(3.0) ((rustling sounds))
D: gogo no (.) ichiji: han desu yo (.)
P: ichiji han [desu]
D: [hai] =
P: = hai
(0.8)
D: kihon (.) teki ni (.) (kami hito) dai (.) tai nitemasu [kara]
P: [sou desu ka]
D: sou itta imi de (.) shii chii nanka to kuraberu to (.) chotto tsurai tokoro wa [arimasu kedomo]
P: [laugh]
D: ne.
P: itami wa nain desu ka?
D: (.) itami to iu yori wa (.) sono (.) ma [zui]
P: [e.]
D: yaku wa chotto nigain desu yo.
P: aha.
D: (0.4) SORE: (.) kyuunyuu shiteru toki ni (.) ano hakike ga [chotto]
P: [ah]
D: shite kurun desu kedo (.) sore o (.) ano: (wore:) itadaite (.) ookiku iki shiteru to desu ne (.) ano masui ga kite kimasu node (.)
P: hah (.)
D: sou naru to kensa wa hijou ni raku ni [narimasu]
P: [ah sou desu ka.] hai.
(2.4)
D: sore de ano: manga ichi (.) tada (.)
P: ((sneeze))
(1.4)
D: hatari toka shite desu ne (.)
P: hai (.)
D: e: sore wa hai no hou ni nagaretari nanka suru to (.) haien ni natte shimau kanou sei ga arimasu node (.)
P: hai.
(2.3) (snap))
D: choushoku wa futsuu ni totte kekkou nan desu kedomo (.)
P: a (.) hai.
D: a no (1.1) oo iru wa desu ne (.)
P: hai.
D: e: (.) tom (.) tomenaide kudasai
P: a hai (wakarimashita.<)
D: °( )°
(11) ((clicks & bangs))
D: chotto matte kudasai.
D: koko saigo (.) chotto matte (.) gomennasai ne.
P: hai.
D: ano: kopi totte(.)
(41) ((a few bangs at the start of this break - maybe door opening/closing. Then complete silence and door again at the end))
********** 16:59.500 blood test **********
D: ato (.) kyou chotto (.) sono yahari ano: nouyou no kanou sei tokamo aru node (.)
P: hai.
D: (0.5) ketsueki no naka noa hakkekkyuu no kazu toka (.)
P: e: .
D: enshou hann hou toka (.) so itta ketsueki itadaite desu ne (.) shirabemasu kara (.)
P: hai.
D: (0.4) ashita made kekka detemasu
P: hai.
D: °desu (.) ne°

Appendix 11 Dialogue 29

(41.00) ((scraping chair, rustling, writing, - Doc seems to be writing out some kind of instructions and moving things round on the table))

********** 17:55.400 instructions for test **********

D: ichi hou gozen juuji ikou desu ne (.)
P: hai.
(2.0) ((writing sounds))
D: nanimo nondari tabetari shinaide [kudasai]
P: [hai] hai.
D: de (.) mata tabereru youni naru no wa: (.) yojihan kara goji gurai desu node (.)
P: ah sou desu ka (.) hai.
D: chou shoku wa shikkari totte [kudasai.]
P: [((laughs))] hai (.)
D: onaka suichaimasu kara ne.
P: hai (.) hai.
D: (0.) de (0.4) k kensa wa (0.5) daitai ichiji gurai ni (.)
P: hai.
D: ano: dai ichi naika no sairai ni kite kudasai.
P: hai.
D: kensa wa (1.6) kensa wa daitai juusanji han sugi kara (.) hajimarimasu kara (.) anmari hayaku kitemo tada matsu dake desu kara =
P: = daiichi no?
D: daii chi no [sairai]
P: [sairai]
D: desu ne (.) ano: nikai no hou ni [(.) arimasu kara (.) ne]
P: [hai (.) hai]
(2.6) ((rustling))
D: (sou iu koto) de (.) sashiagemasu (.)
P: hai.
D: hai.
(89) ((rustling and knocking at start, then slow intermittant keyboard tapping. Finally rustling of paper at the end))

********** 20:04.224 to get CT scan result **********

D: soshitara a. ano: (.) ko. (.) <shii chii torimashita node (.) hou shasenka no hou no (.)
P: hai.
D: ano: shinsatsu suru toki ni (.) kite itadakereba desu ne (.)
P: hai.
(1.4)

********** 20:13.600 Instructions for blood test **********

D: ketsueki kensa o (0.5) nikai (0.4)
P: °hai.°
D: nikai ni arimasu node (.) e: erebe:ta: de agate iku to (.)
P: hai.
D: ano: byou tougawa ni iku hou [no hou]
P: [e:]
D: massugu aruite [iku to]
P: [hai]
D: migitegawa ni (.)
P: hai.
D: ano denkou keijiban [arimasu node]
P: [hai (.) hai]
D: soko de ketsueki totte kudasai.
P: hai.
D: de (.) sono ato ryoukin keisan shite kekkou desu
P: hai.
D: de (.) kono ketsueki kensa to (.) ano: ashita made ni demasu node (.) kensago mata gosetsumei [( )]
P: [hai wakarimashita]
D: e (.)

********** 20:38.464 patient's question about results **********

P: de (.) ashita kensa shitara (.)
D: hai.
P: sono toki kekka wa sugu wakarun desu ka [mou (.)]
D: [sou desu ne] ah (.) tada (.) ano: baikin o baiyou shitari toka suru no wa desu ne (.)
P: ah.
D: chotto jikan kakarimasu [ne:]
P: [ah sou desu ka.]
D: ano: yahari (.) isshuukan kurai [kakarimasu kara]
P: [ah sou desu ka] hai (.) wakarimashita.
D: sore wa mata gojitsu (.)
P: hai.
D: oo hanashi suru (.) [koto ni narimasu ne]

********** 20:52.312 patient confirms understanding **********

P: [ja ketsueki ukete]
D: e: .
P: (.) kochira ni konakutemo (.)
D: e: (.) konomama kono ato (.) [kaikei shite]
P: [kaikei shite yoroshiin desu ne]
D: [kekkou desu]
P: [wakarimashita.]

******* 20:59.200 ending sequence-doctor checks appointment *******

D: (.) de (.) asu ichiji kurai (.)
P: ichiji (.) hai.
D: ichiji zengo ni (.) dai ichi naika no [sairai no hou ni]
P: [hai wakarimashita]
D: ne.
P: hai (.) hai.
D: e (.) kore shashin toka (.) chotto zenbu [okarishite okimasu kara]
P: [hai (.) hai] wakarimashita. doumo arigatou [gozaimasu]
D: [hai (.) hai]

Appendix 12 Questions in the Junior Doctor Consultations

Dialogue	Doctor	Total Turns	%Qs	DQ	%	PQ	%	%DQs	%PQs
18	A1	231	13.0	27	*90.0*	3	*10.0*	23.0	2.56
3	A5	502	14.71	63	*85.1*	11	*14.9*	25.00	4.41
1	A5	442	13.89	56	*91.8*	5	*8.2*	26.32	2.81
39	A3	354	14.93	50	*94.3*	3	*5.7*	28.57	1.69
41	A7	230	16.39	33	*86.8*	5	*13.2*	28.57	4.35
11	A2	160	16.95	27	*100.0*	0	*0.0*	33.33	0
42	A7	199	16.95	33	*97.1*	1	*2.9*	33.33	1.01
40	A3	329	19.23	57	*90.5*	6	*9.5*	34.48	3.64
35	A5	359	18.87	61	*89.7*	7	*10.3*	34.48	3.89
50	A1	413	19.23	75	*94.9*	4	*5.1*	35.71	1.95
20	A1	131	18.3	24	*100.0*	0	*0.0*	37.0	0
19	A1	188	22.34	35	*83.0*	7	*17.0*	40.0	9.90
17	A1	186	20.97	38	*97.0*	1	*3.0*	40.0	1.08
60	A2	185	21.74	37	*92.5*	3	*7.5*	40.00	3.19
71	A6	319	22.57	66	*92.0*	6	*8.0*	41.0	3.75
JD Ave		**230.0**	**22.6**	**45.5**	**92.7**	**3.9**	**7.3**	**41.5**	**3.5**
48	A1	235	20.83	48	*98.0*	1	*2.0*	41.67	0.85
36	A5	261	22.73	55	*91.7*	5	*8.3*	41.67	3.91
68	A6	207	22.73	43	*91.5*	4	*8.5*	41.67	3.88
70	A6	269	23.42	57	*90.0*	6	*10.0*	42.0	4.41
12	A2	191	22.22	42	*100.0*	0	*0.0*	43.48	0
72	A6	153	23.26	34	*94.4*	2	*5.6*	43.48	2.67
14	A2	125	23.81	28	*93.3*	2	*6.7*	43.48	3.23
32	A3	186	23.26	43	*100.0*	0	*0.0*	45.45	0
62	A2	108	25.00	26	*96.3*	1	*3.7*	45.45	1.96
49	A1	242	26.32	56	*87.5*	8	*12.5*	45.45	6.62
2	A5	474	27.78	116	*89.2*	14	*10.8*	47.62	6.06
44	A7	58	29.41	14	*82.4*	3	*17.6*	47.62	10.31
61	A2	112	25.64	29	*100.0*	0	*0.0*	50.00	0
4	A5	173	26.32	44	*95.7*	2	*4.3*	50.00	2.30
69	A6	183	26.8	46	*94.0*	3	*6.0*	51.0	3.33
37	A5	168	29.8	44	*88.0*	6	*12.0*	51.0	7.14
24	A4	216	29.41	56	*88.9*	7	*11.1*	52.63	6.49
43	A7	172	30.30	46	*88.5*	6	*11.5*	52.63	7.14
13	A2	174	31.25	48	*88.9*	6	*11.1*	55.56	7.41
22	A4	116	32.26	37	*100.0*	0	*0.0*	58.82	0

% Qs = proportion of all turns that were questions
DQ = number of questions by doctor (as a proportion % of all questions in this dialogue)
PQ = number of questions by patient (as a proportion % of all questions in this dialogue)
% DQs = proportion of doctor's turns that were questions
% PQs = proportion of patient's turns that were questions

Appendix 13 Questions in the Senior Doctor Consultations

Dialogue	Doctor	Total Turns	%Qs	DQ	%	PQ	%	%DQs	%PQs
59	B1	172	5.24	*4*	*40*	*6*	*60*	3.30	7.41
28	B1	305	4.93	*8*	*53.3*	*7*	*46.7*	5.10	4.90
54	B1	237	7.19	*7*	*41.2*	*10*	*58.8*	5.65	8.85
27	B1	132	3.79	4	*80.0*	1	20.0	5.95	1.54
16	B3	210	4.76	7	*70.0*	3	30.0	6.54	2.92
31	B1	137	5.10	5	*71.4*	2	28.6	6.94	3.08
58	B1	84	5.95	*3*	*60.0*	*2*	*40.0*	6.99	4.88
29	B1	452	5.75	18	*69.2*	8	30.8	7.46	3.79
5	B5	129	4.65	6	*100.0*	0	0.0	8.13	0
63	B4	229	8.70	13	*65.0*	7	35.0	10.87	6.37
67	B4	308	7.46	18	*78.3*	5	21.7	11.36	3.55
51	B1	200	14.08	24	*85.7*	4	14.3	12.20	4.12
SD Ave		198.2	12.1	18.56	*77.5*	5.4	22.5	12.82	4.39
52	B1	130	8.47	9	*81.8*	2	18.2	13.16	3.23
38	B2	226	8.40	16	*84.2*	3	15.8	13.70	2.72
53	B1	318	10.10	24	*75.0*	8	25.0	14.29	5.29
33	B4	335	8.62	25	*86.2*	4	13.8	14.71	2.53
65	B4	191	10.42	17	*85.0*	3	15.0	16.67	3.37
64	B4	249	11.24	22	*78.6*	6	21.4	17.24	4.95
34	B4	126	11.11	12	*85.7*	2	14.3	18.18	3.33
46	B4	240	15.38	*22*	*59.5*	*15*	*40.5*	18.18	12.66
45	B4	184	14.71	19	*70.4*	8	29.6	19.23	9.43
47	B4	169	12.50	17	*81.0*	4	19.0	19.61	4.81
55	B1	115	14.71	13	*76.5*	4	23.5	21.28	7.41
66	B4	208	11.11	23	*100.0*	0	0.0	21.74	0
21	B6	175	18.18	20	*62.5*	12	37.5	21.74	14.29
56	B1	107	14.08	13	*86.7*	2	13.3	22.22	4.08
26	B1	57	15.87	8	*88.9*	1	11.1	22.73	4.55
30	B1	161	13.70	21	*95.5*	1	4.5	25.00	1.32
10	B5	58	15.63	9	*100.0*	0	0.0	27.03	0
73	B2	539	20.00	76	*71.0*	31	29.0	27.78	14.49
8	B5	137	25.00	29	*85.3*	5	14.7	34.48	9.43
6	B5	105	21.74	23	*100.0*	0	0.0	35.71	0
15	B3	419	21.28	88	*97.8*	2	2.2	41.67	0.96
25	B1	123	26.32	27	*84.4*	5	15.6	43.48	8.20
9	B5	131	29.41	36	*92.3*	3	7.7	50.00	5.88
7	B5	64	40.00	24	*92.3*	2	7.7	62.50	8.00
57	B1	173	0	*0*	*0.0*	*0*	*0.0*	0	0

% Qs = proportion of all turns that were questions
DQ = number of questions by doctor (as a proportion % of all questions in this dialogue)
PQ = number of questions by patient (as a proportion % of all questions in this dialogue)
% DQs = proportion of doctor's turns that were questions
% PQs = proportion of patient's turns that were questions

Appendix 14 Percentage of patient backchannels - junior doctor consultations

			B-Ch by Patient			**B-Ch by Doctor**			**Back-channeling by utterance**					
									Patient			**Doctor**		
Dial #	**D#**	**P#**	**Turns**	**Tot**	**%B-C**	**Turns**	**Tot**	**%B-C**	*% hai*	*% ee*	*% un*	*% hai*	*% ee*	*% un*
50	A1	26	205	**78**	**38.0**	208	**38**	**18.3**	55	45	0	87	8	5
1	A5	1	178	**53**	**29.8**	212	**47**	**22.2**	92	6	2	9	68	23
32	A3	19	91	**27**	**29.7**	95	**10**	**10.5**	85	15	0	60	10	30
19	A1	5	71	**21**	**29.6**	85	**16**	**18.8**	90	0	10	100	0	0
36	A5	17	128	**34**	**26.6**	131	**24**	**18.3**	68	32	0	4	79	17
4	A5	4	87	**22**	**25.3**	86	**10**	**11.6**	86	0	14	10	50	40
44	A7	29	29	**7**	**24.1**	29	**3**	**10.3**	100	0	0	100	0	0
2	A5	2	231	**53**	**22.9**	243	**43**	**17.7**	53	11	36	5	84	12
14	A2	8	62	**14**	**22.6**	63	**11**	**17.5**	93	7	0	27	55	18
49	A1	25	121	**27**	**22.3**	121	**25**	**20.7**	19	78	4	72	0	28
20	A1	12	68	**15**	**22.1**	63	**15**	**23.8**	93	7	0	60	0	40
11	A2	9	79	**17**	**21.5**	81	**11**	**13.6**	47	47	6	0	45	55
42	A7	27	99	**19**	**19.2**	100	**26**	**26.0**	63	21	16	58	0	42
41	A7	24	115	**22**	**19.1**	115	**22**	**19.1**	45	14	41	82	0	18
35	A5	16	180	**34**	**18.9**	179	**36**	**20.1**	18	79	3	3	72	25
69	A6	35	90	**17**	**18.9**	93	**26**	**28.0**	100	0	0	15	62	23
40	A3	22	165	**31**	**18.8**	164	**25**	**15.2**	65	16	19	96	4	0
JD Av.			***112***	***21***	***18.4***	***115***	***26.6***	***21.3***	***69.2***	***22.8***	***7.94***	***45.3***	***35.7***	***19***
17	A1	10	93	**17**	**18.3**	93	**22**	**23.7**	88	12	0	86	0	14
48	A1	30	118	**21**	**17.8**	117	**24**	**20.5**	48	52	0	83	17	0
61	A2	32	53	**9**	**17.0**	59	**8**	**13.6**	78	22	0	38	38	25
22	A4	13	54	**9**	**16.7**	62	**4**	**6.5**	33	67	0	75	25	0
43	A7	28	84	**14**	**16.7**	88	**12**	**13.6**	57	14	29	58	25	17
3	A5	3	250	**40**	**16.0**	252	**99**	**39.3**	45	40	15	23	71	6
62	A2	33	51	**8**	**15.7**	57	**7**	**12.3**	100	0	0	43	57	0
68	A6	34	103	**16**	**15.5**	104	**29**	**27.9**	75	19	6	0	72	28
12	A2	7	94	**14**	**14.9**	97	**14**	**14.4**	21	14	64	43	21	36
70	A6	37	136	**19**	**14.0**	133	**46**	**34.6**	63	37	0	11	76	13
72	A6	36	75	**10**	**13.3**	78	**21**	**26.9**	100	0	0	14	76	10
37	A5	18	84	**10**	**11.9**	84	**30**	**35.7**	100	0	0	17	80	3
13	A2	6	81	**9**	**11.1**	85	**5**	**5.9**	78	22	0	80	20	0
39	A3	21	178	**17**	**9.6**	176	**76**	**43.2**	94	6	0	92	1	7
60	A2	31	94	**7**	**7.4**	91	**14**	**15.4**	57	29	14	36	36	29
18	A1	11	117	**8**	**6.8**	114	**45**	**39.5**	63	38	0	89	0	11
71	A6	38	160	**10**	**6.3**	159	**61**	**38.4**	100	0	0	7	74	20
24	A4	15	108	**6**	**5.6**	108	**26**	**24.1**	50	50	0	4	23	73

Appendix 15 Percentage of patient backchannels - senior doctor consultations

			B-Ch by Patient			B-Ch by Doctor			Back-channeling by utterance					
									Patient			Doctor		
Dial #	**D#**	**P#**	**Turns**	**Tot**	**%B-C**	**Turns**	**Tot**	**%B-C**	*% hai*	*% ee*	*% un*	*% hai*	*% ee*	*% un*
57	B1	26	86	**73**	**84.9**	87	**1**	**1.1**	92	8	0	100	0	0
31	B1	18	65	**48**	**73.8**	72	**5**	**6.9**	94	2	4	100	0	0
34	B4	19	60	**42**	**70.0**	66	**2**	**3.0**	90	5	5	0	100	0
33	B4	13	158	**106**	**67.1**	171	**6**	**3.5**	91	0	9	50	17	33
29	B1	17	211	**130**	**61.6**	241	**18**	**7.5**	71	20	9	17	33	50
38	B2	20	110	**65**	**59.1**	116	**2**	**1.7**	89	3	8	50	0	50
5	B5	1	55	**32**	**58.2**	74	**0**	**0.0**	100	0	0	0	0	0
54	B1	24	113	**64**	**56.6**	124	**7**	**5.6**	48	50	2	29	57	14
64	B4	35	121	**68**	**56.2**	128	**15**	**11.7**	85	7	7	0	87	13
58	B1	22	41	**23**	**56.1**	43	**2**	**4.7**	74	22	4	50	50	0
67	B4	33	141	**77**	**54.6**	158	**10**	**6.3**	66	3	31	0	100	0
16	B3	10	103	**51**	**49.5**	107	**2**	**1.9**	67	31	2	50	50	0
53	B1	25	151	**74**	**49.0**	167	**16**	**9.6**	66	19	15	25	50	25
6	B5	5	41	**20**	**48.8**	64	**6**	**9.4**	100	0	0	33	33	33
52	B1	24	62	**29**	**46.8**	68	**3**	**4.4**	31	55	14	33	67	0
73	B2	37	214	**97**	**45.3**	276	**9**	**3.3**	56	34	10	33	44	22
B Ave			***92.2***	***43.6***	***45***	***106***	***8.89***	***8.22***	***66***	***21.1***	***13***	***30.2***	***38.1***	***24***
56	B1	22	49	**22**	**44.9**	58	**2**	**3.4**	68	18	14	50	0	50
28	B1	14	143	**63**	**44.1**	157	**11**	**7.0**	68	3	29	9	73	18
10	B5	8	25	**11**	**44.0**	33	**0**	**0.0**	100	0	0	0	0	0
27	B1	16	65	**28**	**43.1**	67	**7**	**10.4**	14	71	14	0	0	100
65	B4	32	89	**38**	**42.7**	102	**12**	**11.8**	82	3	16	0	58	42
15	B3	9	208	**88**	**42.3**	211	**10**	**4.7**	53	31	16	40	10	50
51	B1	23	97	**39**	**40.2**	197	**33**	**16.8**	15	31	54	12	39	48
66	B4	36	102	**41**	**40.2**	106	**22**	**20.8**	78	0	22	23	45	32
59	B1	31	81	**31**	**38.3**	91	**6**	**6.6**	74	23	3	50	50	0
30	B1	15	76	**29**	**38.2**	85	**13**	**15.3**	34	52	14	15	31	54
8	B5	7	53	**20**	**37.7**	84	**3**	**3.6**	50	30	20	67	0	33
55	B1	26	54	**20**	**37.0**	61	**12**	**19.7**	70	30	0	58	17	25
46	B4	27	118	**43**	**36.4**	122	**17**	**13.9**	19	47	35	6	94	0
47	B4	21	83	**29**	**34.9**	86	**13**	**15.1**	79	3	17	31	31	38
63	B4	34	110	**35**	**31.8**	119	**28**	**23.5**	57	11	31	0	79	21
21	B6	11	84	**24**	**28.6**	91	**8**	**8.8**	88	13	0	0	63	38
45	B4	30	85	**21**	**24.7**	99	**9**	**9.1**	62	38	0	11	67	22
25	B1	14	61	**14**	**23.0**	62	**10**	**16.1**	86	14	0	90	0	10
26	B1	16	22	**5**	**22.7**	35	**3**	**8.6**	60	40	0	67	33	0
7	B5	6	25	**4**	**16.0**	39	**0**	**0.0**	0	50	50	0	0	0
9	B5	2	51	**8**	**15.7**	73	**6**	**8.2**	63	13	25	17	33	50

Appendix 16 Average Utterance Length By Patient

Rec.#	P mean Utt (wds)	P Wds	P Turns	D mean Utt (wds)	D #	P. #	Secs	D Wds	D Turns	3rd?	3Pers Wds
18	18.15	2123	117	6.09	A1	11	1196	694	114	N	0
20	13.75	935	68	9.11	A1	12	698	574	63	N	0
71	12.60	2016	160	4.23	A6	38	1148	672	159	N	0
49	12.49	1511	121	8.40	A1	25	1375	1016	121	N	0
48	12.05	1422	118	9.32	A1	30	1474	1091	117	N	0
21	11.11	933	84	22.31	B6	11	2109	2030	91	N	0
70	10.51	1429	136	4.40	A6	37	812	585	133	N	0
40	10.33	1705	165	7.88	A3	22	1140	1293	164	N	0
60	10.12	951	94	5.64	A2	31	785	513	91	N	0
17	10.09	938	93	6.01	A1	10	752	559	93	N	0
61	9.64	511	53	8.05	A2	32	551	475	59	N	0
3	9.43	2358	250	4.54	A5	3	1202	1145	252	N	0
62	9.35	477	51	8.05	A2	33	648	459	57	N	0
35	9.12	1642	180	8.47	A5	16	956	1516	179	N	0
37	8.96	753	84	9.07	A5	18	580	762	84	N	0
25	8.11	495	61	6.98	B1	14	696	433	62	N	0
JD mean	**8.1**	**922.4**	**112.3**	**7.2**			**771.0**	**796.1**	**115.0**		**16.0**
68	7.93	817	103	5.83	A6	34	583	606	104	N	0
39	7.87	1400	178	8.49	A3	21	1069	1495	176	N	0
72	7.68	576	75	5.53	A6	36	421	431	78	N	0
11	7.54	596	79	7.23	A2	9	528	586	81	N	0
45	7.49	637	85	15.82	B4	30	1115	1566	99	N	0
69	7.30	657	90	6.39	A6	35	508	594	93	N	0
12	7.28	684	94	7.22	A2	7	612	700	97	N	0
46	7.19	849	118	20.47	B4	27	1299	2497	122	N	0
24	7.10	767	108	7.27	A4	15	1149	785	108	N	0
51	6.79	659	97		B1	23	455	302	97	Y Ns.	24
8	6.70	355	53	18.93	B5	7	1337	1590	84	N	0
42	6.55	648	99	6.13	A7	27	529	613	100	N	0
50	6.53	1338	205	7.03	A1	26	1474	1463	208	N	0
36	6.44	824	128	6.88	A5	17	641	901	131	Y Doc2	21
73	6.43	1377	214	12.48	B2	37	2193	3444	276	Y Rl.	241
66	6.17	629	102	8.37	B4	36	533	887	106	N	0
MEAN	**6.16**	**643.91**	**99.64**	**9.48**			**785.84**	**951.44**	**107.50**		**10.31**
19	6.11	434	71	6.62	A1	5	706	563	85	Y Rl.	248
41	5.61	645	115	6.87	A7	24	562	790	115	N	0
32	5.58	508	91	8.67	A3	19	508	824	95	N	0
13	5.47	443	81	7.87	A2	6	603	669	85	Y Rl.	56
7	5.44	136	25	13.41	B5	6	490	523	39	N	0
63	5.31	584	110	6.31	B4	34	634	751	119	N	0
14	5.13	318	62	6.94	A2	8	340	437	63	N	0
15	5.02	1045	208	10.31	B3	9	1420	2176	211	N	0
47	4.95	411	83	8.26	B4	21	589	710	86	N	0

4	4.87	424	87	6.60	A5	4	410	568	86	N	0
55	4.72	255	54	7.85	B1	26	425	479	61	N	0
44	4.69	136	29	9.00	A7	29	131	261	29	N	0
30	4.62	351	76	8.24	B1	15	715	700	85	N	0
22	4.52	244	54	8.26	A4	13	503	512	62	N	0
2	4.35	1004	231	6.49	A5	2	1162	1578	243	N	0
SD mean	**4.24**	**365.38**	**86.94**	**11.77**			**800.68**	**1106.74**	**100.00**		**4.62**
27	4.20	273	65	10.21	B1	16	356	684	67	N	0
6	4.17	171	41	8.75	B5	5	754	560	64	N	0
1	4.04	719	178	5.05	A5	1	708	1070	212	Y Rl.	235
59	4.00	324	81	12.59	B1	31	802	1146	91	N	0
43	3.95	332	84	12.10	A7	28	521	1065	88	N	0
56	3.82	187	49	14.72	B1	22	624	854	58	N	0
65	3.81	339	89	7.51	B4	32	642	766	102	N	0
16	3.59	370	103	8.78	B3	10	467	939	107	N	0
9	3.49	178	51	11.42	B5	2	974	834	73	Y Ns.	51
28	3.43	491	143	9.05	B1	14	872	1421	157	Y Ns.	24
26	3.32	73	22	19.63	B1	16	663	687	35	N	0
33	3.15	497	158	10.17	B4	13	881	1739	171	Y Ns.	58
64	3.14	380	121	12.14	B4	35	986	1554	128	N	0
53	3.09	466	151	11.93	B1	25	1562	1993	167	N	0
67	3.01	424	141	8.69	B4	33	1055	1373	158	Y Rl.	34
54	2.89	327	113	8.04	B1	24	500	997	124	N	0
31	2.88	187	65	16.67	B1	18	612	1200	72	N	0
34	2.75	165	60	11.21	B4	19	408	740	66	N	0
52	2.63	163	62	7.97	B1	24	505	542	68	N	0
29	2.47	522	211	8.42	B1	17	1276	2029	241	N	0
58	2.37	97	41	9.84	B1	22	264	423	43	N	0
38	2.14	235	110	22.12	B2	20	1444	2566	116	N	0
10	2.12	53	25	19.06	B5	8	433	629	33	N	0
5	1.64	90	55	10.58	B5	1	590	783	74	N	0
57	1.45	125	86	9.03	B1	26	324	786	87	N	0

Appendix 17 Average Turn Length By Doctor

Consultation	D Mean Turn (words)	P Mean Turn (words)	D #	P.#	3rd Person?	Secs	D Wds	P Wds	3rd Pers Wds	D Turns	P Turns
21	22.31	11.11	B6	11	N	2109	2030	933	0	91	84
38	22.12	2.14	B2	20	N	1444	2566	235	0	116	110
46	20.47	7.19	B4	27	N	1299	2497	849	0	122	118
26	19.63	3.32	B1	16	N	663	687	73	0	35	22
10	19.06	2.12	B5	8	N	433	629	53	0	33	25
8	18.93	6.70	B5	7	N	1337	1590	355	0	84	53
31	16.67	2.88	B1	18	N	612	1200	187	0	72	65
45	15.82	7.49	B4	30	N	1115	1566	637	0	99	85
56	14.72	3.82	B1	22	N	624	854	187	0	58	49
7	13.41	5.44	B5	6	N	490	523	136	0	39	25
59	12.59	4.00	B1	31	N	802	1146	324	0	91	81
73	12.48	6.43	B2	37	Y Rl.	2193	3444	1377	241	276	214
64	12.14	3.14	B4	35	N	986	1554	380	0	128	121
43	12.10	3.95	A7	28	N	521	1065	332	0	88	84
53	11.93	3.09	B1	25	N	1562	1993	466	0	167	151
B Ave	11.77	4.24				800.68	1106.74	365.38	4.62	100.00	86.94
9	11.42	3.49	B5	2	Y Ns.	974	834	178	51	73	51
34	11.21	2.75	B4	19	N	408	740	165	0	66	60
5	10.58	1.64	B5	1	N	590	783	90	0	74	55
15	10.31	5.02	B3	9	N	1420	2176	1045	0	211	208
27	10.21	4.20	B1	16	N	356	684	273	0	67	65
33	10.17	3.15	B4	13	Y Ns.	881	1739	497	58	171	158
58	9.84	2.37	B1	22	N	264	423	97	0	43	41
AVE	9.48	6.16				785.84	951.44	643.91	10.31	107.50	99.64
48	9.32	12.05	A1	30	N	1474	1091	1422	0	117	118
20	9.11	13.75	A1	12	N	698	574	935	0	63	68
37	9.07	8.96	A5	18	N	580	762	753	0	84	84
28	9.05	3.43	B1	14	Y Ns.	872	1421	491	24	157	143
57	9.03	1.45	B1	26	N	324	786	125	0	87	86
44	9.00	4.69	A7	29	N	131	261	136	0	29	29
16	8.78	3.59	B3	10	N	467	939	370	0	107	103
6	8.75	4.17	B5	5	N	754	560	171	0	64	41
67	8.69	3.01	B4	33	Y Rl.	1055	1373	424	34	158	141
32	8.67	5.58	A3	19	N	508	824	508	0	95	91
39	8.49	7.87	A3	21	N	1069	1495	1400	0	176	178
35	8.47	9.12	A5	16	N	956	1516	1642	0	179	180
29	8.42	2.47	B1	17	N	1276	2029	522	0	241	211
49	8.40	12.49	A1	25	N	1375	1016	1511	0	121	121
66	8.37	6.17	B4	36	N	533	887	629	0	106	102

22	8.26	4.52	A4	13	N	503	512	244	0	62	54
47	8.26	4.95	B4	21	N	589	710	411	0	86	83
30	8.24	4.62	B1	15	N	715	700	351	0	85	76
61	8.05	9.64	A2	32	N	551	475	511	0	59	53
62	8.05	9.35	A2	33	N	648	459	477	0	57	51
54	8.04	2.89	B1	24	N	500	997	327	0	124	113
52	7.97	2.63	B1	24	N	505	542	163	0	68	62
40	7.88	10.33	A3	22	N	1140	1293	1705	0	164	165
13	7.87	5.47	A2	6	Y Rl.	603	669	443	56	85	81
55	7.85	4.72	B1	26	N	425	479	255	0	61	54
65	7.51	3.81	B4	32	N	642	766	339	0	102	89
24	7.27	7.10	A4	15	N	1149	785	767	0	108	108
11	7.23	7.54	A2	9	N	528	586	596	0	81	79
12	7.22	7.28	A2	7	N	612	700	684	0	97	94
A Ave	7.2	8.1				771.0	796.1	922.4	16.0	115.0	112.3
50	7.03	6.53	A1	26	N	1474	1463	1338	0	208	205
25	6.98	8.11	B1	14	N	696	433	495	0	62	61
14	6.94	5.13	A2	8	N	340	437	318	0	63	62
36	6.88	6.44	A5	17	Y Doc2	641	901	824	21	131	128
41	6.87	5.61	A7	24	N	562	790	645	0	115	115
19	6.62	6.11	A1	5	Y Rl.	706	563	434	248	85	71
4	6.60	4.87	A5	4	N	410	568	424	0	86	87
2	6.49	4.35	A5	2	N	1162	1578	1004	0	243	231
69	6.39	7.30	A6	35	N	508	594	657	0	93	90
63	6.31	5.31	B4	34	N	634	751	584	0	119	110
42	6.13	6.55	A7	27	N	529	613	648	0	100	99
18	6.09	18.15	A1	11	N	1196	694	2123	0	114	117
17	6.01	10.09	A1	10	N	752	559	938	0	93	93
68	5.83	7.93	A6	34	N	583	606	817	0	104	103
60	5.64	10.12	A2	31	N	785	513	951	0	91	94
72	5.53	7.68	A6	36	N	421	431	576	0	78	75
1	5.05	4.04	A5	1	Y Rl.	708	1070	719	235	212	178
3	4.54	9.43	A5	3	N	1202	1145	2358	0	252	250
70	4.40	10.51	A6	37	N	812	585	1429	0	133	136
71	4.23	12.60	A6	38	N	1148	672	2016	0	159	160
51		6.79	B1	23	Y Ns.	455	302	659	24	97	97